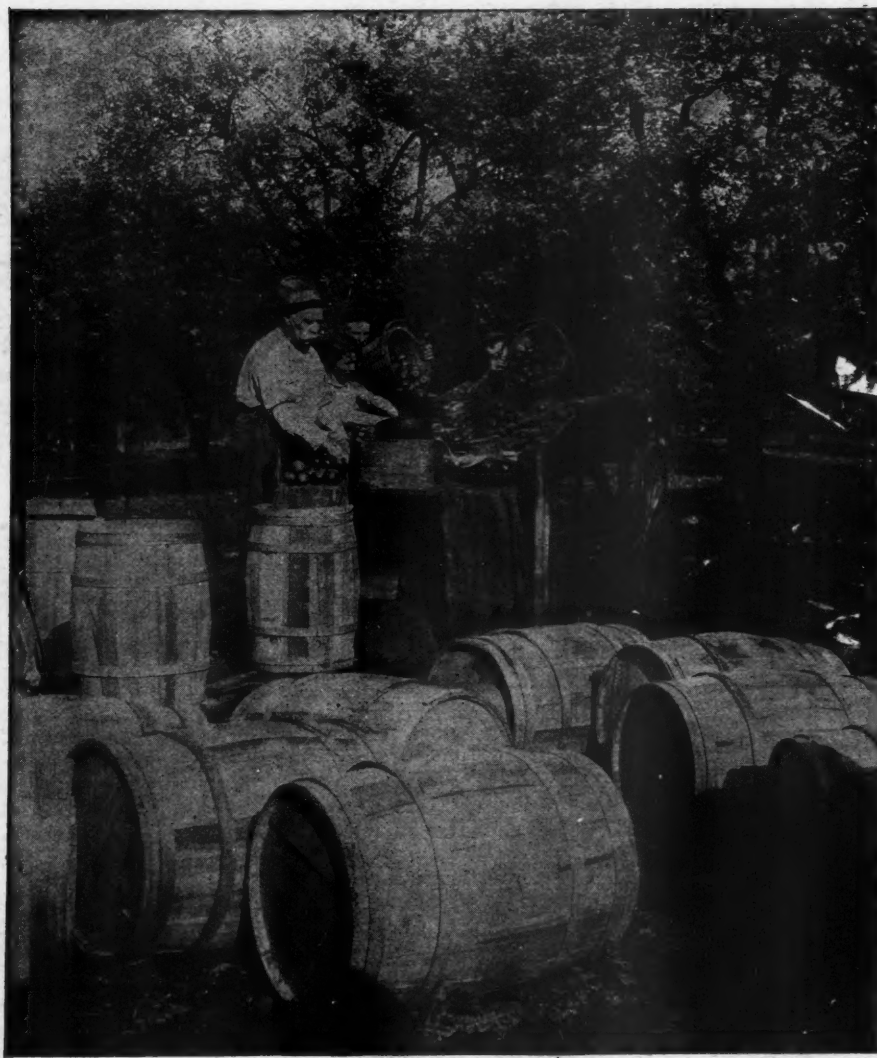


GREEN'S FRUIT GROWER

The Oldest Fruit Journal in America



Charles A. Green, Editor



* Star shows J. H. Hale superintending loading of cars of J. H. Hale peaches, Fort Valley, Georgia

J. H. Hale Peaches Bring 33% More Profit Than Elbertas

The carload of J. H. Hale peaches pictured above was shipped by Mr. Hale from his 2,000 acre peach orchard at Fort Valley, Georgia, to the New York market, Saturday, August 1, 1914. The J. H. Hale peaches brought \$2.50 per crate, as against \$2.00 per crate for Elbertas from the same orchard, or 50c per crate more for the J. H. Hales. Figuring a growing and marketing cost of \$1.00 per crate, the profit on the J. H. Hale peaches was 33 1/3% higher than on the Elbertas.



Why the J. H. Hale Makes Most Money for Growers

Size: Averages 1/4 to 1/2 larger than Elberta. Round, uniform shape.

Color: Rich, golden yellow, overlaid with carmine. Colors up ten days before maturity.

Flesh: Solid and meaty. Texture of a cling, yet perfect freestone. Won't "squash down" in basket.

Skin: Tight and smooth. As fuzzless as an apricot.

Shipping: So firm it ships almost like apples. Long keeper permits wide market distribution.

Flavor: Luscious, juicy, peachy. Far superior to Elberta.

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Adaptability: Succeeds in widely different peach soils and climates. Tested for 9 years in 3,000 plantings.

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It was only with the advent of the Elberta that commercial peach growing really became a financial success. Elberta peaches have made hundreds of thousands of dollars for growers everywhere. And now comes a peach so superior in every way to Elberta that planters, commission men and experts alike have named it "The Million Dollar Peach."

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Horticulture Affected By War

THE great war in Europe is the absorbing topic of the day and well it may be, for it is not only a cruel wrong perpetrated on the common people there by some of the few self-appointed crowned heads, but it affects the rest of the world as well. Humanity everywhere is one great family, although the ties between some races may not be very close. We all have the solemn duty to perform towards one another of showing our good will, no matter what may be the attitude that others may take. Animosity is almost sure to exist because of misunderstanding, and if reason and not force is first brought into play there will usually be no need of the latter. It is better to bear considerable wrong than to retaliate or even contend, for contention is apt to end in wrong on both sides, except in matters of real principle and where manly fortitude is demanded. Mere hot-headedness never pays any one, especially the originator, and I hope it will prove so in this wicked needless, savage war that was brought on by the autocrats. No human mind can estimate the misery it will bring to the common people.

Diminished Apple Exports

We have an extensive trade with Europe in fruits and nuts as well as in other food materials and in manufactures. We look to those countries to take a considerable part of the surplus apple crop of America, and this may not be possible this year. The buyers for those markets have at present almost abandoned the trade that was begun in this country. Practically no foreign contracts are being made for our winter apples, and there is a normal crop assured, according to reports. The Canadian shipments to England will probably be more nearly up to the standard than those from the States, for their own and the English ships will, perhaps, soon resume the most of their trips across the Atlantic. In the absence of the foreign call from Europe, what will we do with the excess of apples above our own needs? This is a grave question for the growers and dealers to decide, and it must be decided now. Being perishable it will not be wise to hold many of the apples in storage with the expectation or even hope of finally selling them abroad when the war is over. That is a solemn problem that the wisest cannot foresee, for the greatest nations on the earth are in a death grapple and no one knows how long it will last. Even if it should soon stop, there has already been so much money spent for arms and ammunition with which to kill one another, and the taxes for the future will be such a burden, that the people of all Europe will be forced to live on the bare necessities in larger measure than ever. The trade of Germany, our largest apple buyer, is sure to be about nothing this year for the above reasons, and also because their shipping is all stopped and the most of their trading vessels are captured or under blockade and their ports as well. Holland is so near the war zone that her trade is endangered from floating mines, and there is almost no business being done in either importing or exporting. France grows about all the apples used there and Belgium is so blighted and impoverished by the invaders that the people cannot buy anything beyond absolute necessities. It is likely that we will get few nuts from Europe this year and this will raise the price of our own supply.

Dried Apples

It is quite probable that there may be a foreign trade of some consequence in evaporated and canned fruits. As they will keep for a long time and do not have to be sold soon to save them, it will be well to dispose of all that can be used in this way. This is especially advisable for the lower grades of apples, for they will bring very poor prices in market and injure the sale of the better grade by their presence. Only the choice apples should be kept into the winter.

Grading and Packing

Greater care than usual should be used in grading and packing the winter apples for market. The dealers and consumers will be more critical than ever, and those who are careless about the preparation of what they have to sell will suffer loss.

Apples For Stock Food

Some of the lower grades of apples may be fed to stock with profit. Fed in reasonable amount they are wholesome and nutritious, but good judgment is needed to prevent injury from overfeeding to cattle especially. Hogs and sheep are not likely to eat too many

apples for their own good, as I have tried them. Horses will eat a lot of them to good advantage.

Other Apple Products

Apple butter is something that always comes in very well at home and the surplus can be sold if it is properly made and handled. The best of the ripe apples should be pared for the filling, and the cider made from the next best. It is a mistake to make cider from poor apples, for it will be correspondingly poor. They may be small but they should be good in quality, free from rot, especially bitter-rot specks, and be clean. All bad flavors go into the cider, and boiling does not destroy them. Boiled cider used to have a good sale, but for many years past I have seen or heard almost nothing of it. There is nothing better to use in making mince pies and some kinds of puddings. The boiling should reduce it about three-fourths, in which state it will keep well without fermenting in cool weather. There is a new process of evaporating cider by freezing much of the water out of it, which makes a product that retains all the good flavor. The details of this process can be had by applying to the United States Department of Agriculture.

the war may more than offset the cheaper freight from Chili to the Atlantic ports.

As we get many millions of small nursery trees from Europe, especially seedling stocks and evergreens, the trade in these will be greatly affected. France, Belgium and Holland furnish the most of them, and it is now almost impossible to have them dug and shipped. The men are busy digging trenches in which to fight and graves for their dead fellow-men instead of trees for export. The nurseries will be trodden down by men and horses and the ground plowed up by shot and shell. Nothing will be respected or spared intentionally. The ruthless Teutons are cutting down the orchard trees to make campfires and eating the grapes from the vineyards in Belgium and France, and the Russians are doing the same in Germany and Austria.

Seeds and Bulbs

Many kinds of seeds are grown in Europe for our planting, and these will be cut off in great measure, there is no doubt. Millions of vegetables and flowers that were planned to be grown in this country next year will never be seen, especially those from seeds that are usually grown in the countries where the fighting is now in progress. Some of the bulbs from Holland have already been shipped, but now that it is dangerous to sail the North Sea, we may not look for many more.

The whole world is being shocked and set awry by the carrying out of the devilish ambitions of the few who now have the power to "let loose the dogs of war." May the declaration of Christ come true that says "For they that take the sword shall perish by the sword."—H. E. Van Deman.

Sciences Wonderful Machinery

Science sees the invisible. It hears the inaudible. It weighs the imponderable and measures the immeasurable. These and other miracles are accomplished by the use of machinery constructed to supplement the senses with which nature has endowed us. The telescope is a case in point. So are the microscope, the spectroscope and the microphone.

There are other instruments of which the ordinary man hears little, however. These are of infinite delicacy and precision, but their use is known only to men of science, and they are confined strictly to the laboratory.

There is the bolometer, for instance, the most accurate and delicate of the thermometers. It registers temperatures to the 100-millionth of a degree. Passed over the spectrum, it shows the inconceivably minute differences in heat between the colors. It searches out the temperature in the light rays from the distant stars.

Another instrument of precision is the electroscope, which is 500,000 times more delicate in its indications than the spectroscope. It carries us so far into the realms of the infinitesimal as to reveal the atom, a feat that we are better able to appreciate when we consider that there are billions upon billions of atoms in the very smallest particle of matter which it is possible to observe through the most powerful of the microscopes.

Still another little machine whose work is fairly awe-inspiring is the radiometer. Physicists have long suspected that light waves, as they rush through space, exercise a definite physical pressure upon material objects against which they wash. The suspicion was not verified, however, until this instrument was constructed.

It not only demonstrates that such a pressure actually exists, but measures it with absolute accuracy, no matter whether the light comes direct from a star or is reflected from a face or other object miles away.

Panama Rates

The new rates from the Pacific Coast by way of the Panama Canal have been already announced by some of the steamship lines. It appears that eastern produce farmers will have to meet still more severe competition when freight rates are cut from 50 to 75 per cent. from the former charges. Pacific Coast shippers will save from \$100 to \$200 per carload, even allowing for charges of shipment from their orchards to the seaport. The rates for apples are not out yet, but judging by the charges on dried fruit and some other produce, it will cost less than one-half the present amount to ship apples by water from the orchards of Oregon and Washington to New York and Boston. The advantage will be somewhat offset by the long time required for the water trip, and by the various transfers.

Some Good Things In This Issue

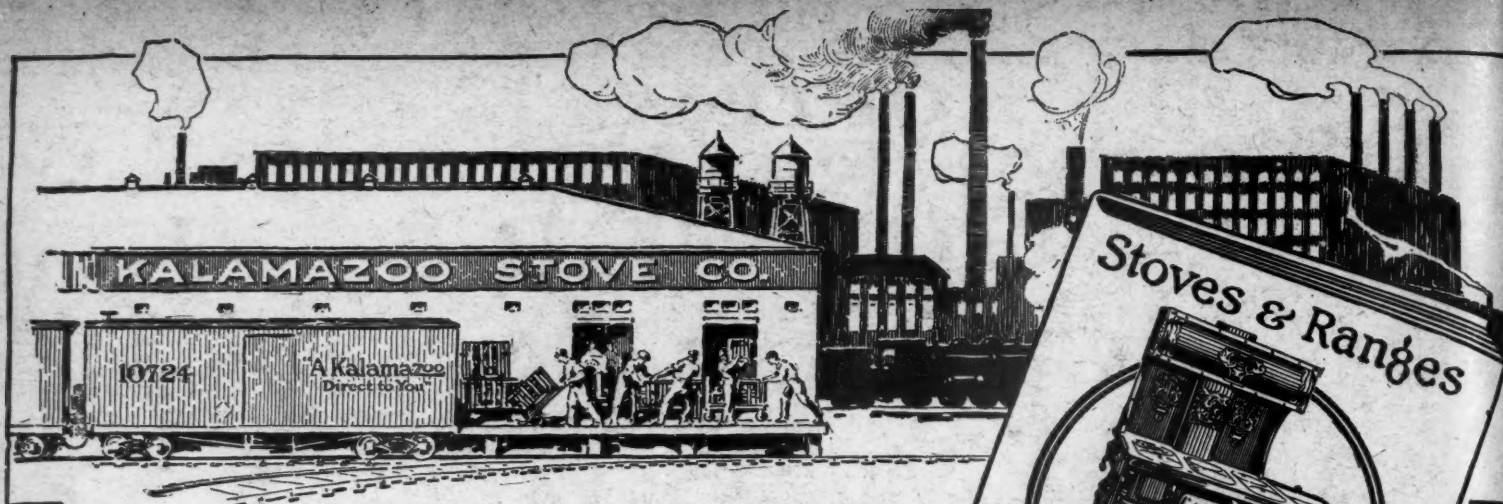
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The Potash Supply

One result of the war that may be overlooked is the stoppage of all importation of potash from Germany. This will have a very material effect on the fertilizer question, especially the manufacture and use by all who need these mixtures. The price will rise accordingly, for we have no other really available source of supply of consequence. It will be necessary to plan for the enrichment of the soil without the German products. There is a vast store of potash in all arable soils and this can be made far more available than it now is by the use of lime. Properly applied it will help to unlock the natural combinations that hold the potash in such forms that the roots of plants cannot get hold of it except in a very limited way. This subject should be well studied by all fruit growers and others who till the soil. There are some excellent bulletins and other publications that treat of it and they can be had of the state and national agricultural authorities for the asking. Some good may come from the war through the stimulus to the more intelligent and popular use of lime in the soil.

Nitrate of Soda

Nitrate of soda will come through the Panama canal now more cheaply, so far as freight is concerned, than when it all had to be taken around Cape Horn, but the great call for it to use in making powder to carry on



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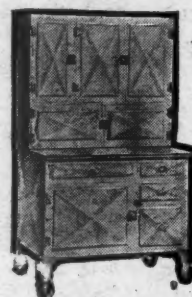


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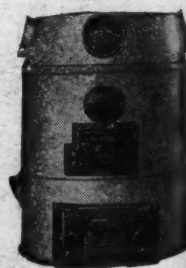
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The Oldest
Fruit Journal
in America

GREEN'S FRUIT GROWER

Published by
Green's
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Company

Volume 34

Rochester, N. Y., November, 1914

Number 11

The Best Variety of Grape

THE question is frequently asked: "What is the best variety of grape to plant?" If tastes were alike the decision would not be so difficult, but they vary to such an extent that what is best to one person is far from best to another, says New York Tribune. The Concord gives more general satisfaction than any other variety, which is probably due to the fact that it grows freely, fruits well, bears transportation and is cheap. More people eat the Concord than any other variety. But it is not the best grape in flavor or texture or productiveness for the person who wishes to plant a vine. The Worden

year, while two or three varieties will yield fruit no one or more of the vines. Climatic conditions or some neglect or oversight may interrupt the bearing of one variety, whereas, with two or more varieties the conditions will be favorable for a crop from one or more of them. The experienced vineyardist may not coincide in this opinion for himself and his professional brethren, but farmers may find it a good rule. Moore's Early is a good grape, so is Campbell's Early; and Green Mountain is highly spoken of by those who have fruited it well. Other varieties are put before us in the fruit catalogues, but the farmer may rely on Worden, Concord, Brighton,

the roots. After planting, the care of the vine is a delight and repays by its heavy clusters of fruit the little time that is required to train and prune it.

Starting Model Orchards

The list of apple varieties set in the model orchards that were started in Hampden county, Mass., this spring, is interesting, as hinting that some of the new kinds may be gaining in popularity over the old favorites. Instead of setting mostly Baldwins, only 16 per



Scene in Vineyard on Bay Shore at Rochester, N. Y.

will produce as large a crop as the Concord, and as constantly. Its bunches are larger, its berries are larger, its flavor is better. The Worden has a flavor that is superior to the Concord, and so sweet that, tested side by side with the Concord, the average person might not always be able to decide which was which with his eyes shut. The Worden has the advantage of appearance. The bunches are more uniform, are larger, and the big, round berries are beautiful among the leaves. With equal care the Worden will produce more weight of fruit than the Concord. It is as easy to propagate, and fruits sooner from cuttings than Concord.

The Niagara is as fruitful as the Concord, not so even a bearer, but beautiful in appearance, strong and vigorous in growth, of delicious quality. The Brighton has a flavor of its own, and is indispensable on the home place. It is a little shy in bearing, compared with the Worden, but if well cared for it is a delight, in flavor, size of bunch and berry and in the abundance of fruit produced. If planted alone it may be a disappointment. It needs the Worden or Concord near to pollinize and make it fruitful. The Delaware is delicious, but requires more care to make it fruitful than either of the others. Some say it grows vigorously and bears profusely. I do not find it so. Perhaps I may yet supply the requisite food to get these results; but if it fruits moderately it is so delicious as to demand a place on the arbor.

Advantage of Variety

One advantage of a number of different varieties of grapevines is that with the best treatment of the ordinary farmer a single variety may fail to bear every

Niagara and Campbell's Early, and with ordinary care he would have from these kinds a pleasing variety of delicious fruit.

Importance of Planting

Planting the vine is as important as any of the varied operations in its care, if not the most important. If the planting is slighted or not well done, the after care will need to be thorough and continuous, in order to get good results. Planting is simple, and a little extra labor at the start will make a great deal of difference in the planter's favor in the growth and fruitage of the vine. It is poor planting to dig a small hole, thrust in the vine, shovel in the dirt and tramp it down. Vines live under such treatment, but they thrive if a large hole is dug, the vine set in the middle, with the roots well spread out, good rich soil sprinkled on and worked down among the roots with the fingers, the hole filled up and dirt firmed down. A vigorous vine thus planted will make from six to ten or fifteen feet of growth in a season. Vigor is what we need in the vine, and this may be had by supplying plant food in abundance for the new roots to strike into. We are warned not to put manure under or on the roots when planting. A good rule is to put earth about the roots, and manure on top of the earth, but if the earth is not rich and manure is mixed with it to fill in about the roots the vine will signify its satisfaction to the planter by its vigorous growth and early fruitage. I speak now for the home vine, not the vine for wine or a large vineyard which is to have constant cultivation and abundant fertilization on the surface. Bone meal is an excellent fertilizer, as are wood ashes spread about the ground over

cent. of the trees were of that kind, 21 per cent. were McIntosh and 23 per cent. Wagener, while 10 per cent. were Duchess and 9 per cent. Wealthy, says The American Cultivator.

The figures are a little deceptive, because the kinds most numerous were used as fillers and, under some plans of setting, it takes many more filler trees than it does of the trees that are to remain. The varieties that lead in numbers are especially good as fillers, because they bear at an early age and are more likely than some of the older market kinds to give annual crops. It is still good advice to set Baldwins when in doubt regarding selection of the permanent trees of an orchard. In these model orchards, the standard kinds were set 40 feet apart, and the filler trees used between. Some of the orchards were set on new plowed land, and have been growing as well as those on land longer in tillage. The owners are planting corn, potatoes and truck crops between the trees, and are also sowing cover crops at the late cultivation of the money crops.

Among the favorite cover crops used by Hampden county orchardists are oats and peas; rye and vetch, using a quarter of a bushel of rye and 30 pounds of vetch; rye and mammoth clover, one and one-quarter bushels rye and 15 pounds of clover; rye and crimson clover, using one and one-quarter bushels of rye and 15 pounds of clover. A modification used in some parts of New England is to substitute buckwheat for rye. In several of these mixtures, buckwheat and mammoth clover make a good combination for sowing at this time, and the seed is not very expensive. It is a good mixture for sowing on fields that have a little witchgrass in them. The buckwheat will help kill it out.

Walks and Talks With Readers

By Charles A. Green, Editor

No, Never, Never! Nothing was ever done to-morrow. Everything that has been done on earth, including the creation of the heavens and the earth, has been done to-day.

There is good reason then why things postponed until to-morrow are not likely ever to be done. From my life-long experience with mankind and with things I have come to the conclusion that when my friend, my associate, says, "Not now, but bye and bye," I have a deep-seated feeling that this postponed work will never be accomplished. I look upon such a statement as evasive, and yet there are many who really think they will do things that are postponed or put off until some future date.

If the people of this world should set about resolutely to do things to-day the world would be revolutionized in a short space of time.

A Rocky World

If we drill a hole deep down in the earth a hundred or a thousand feet we will probably find on the surface 5, 10, 50 or 100 feet of soil, and beneath this soil rocks of various kinds and textures. How far this rock extends toward the center of the earth is not known, but the earth is almost entirely made up of rock.

When the world was new there was no soil upon it. The surface was all rock. It has required millions of years of grinding rock by glaciers and by the wear and tear of water and frost to chisel from the rocky surface small particles which we call sand or soil. This soil which encompasses the earth is not nearly so thick upon the earth as is represented by the shell which surrounds an egg. When earthquakes occur and mountains are split open and thrust up toward the sky, we see little but masses of rock.

Considering the entire earth as a single monstrous rock, how strange that it can float in space like a soap bubble. Is not this fact almost unconceivable?

Missouri Apples

A friend returning to Rochester from Missouri brought me a sample of two apples grown in Missouri. I have had an exalted opinion of Missouri apples, but these samples do not add to my high opinion of Missouri grown fruit, for the varieties are small and not perfect, and yet each apple was wrapped in tissue paper as offered in the St. Louis markets and packed in boxes as though superior specimens. One sample was a Winesap, measuring one and one-half inches in length and less than that in width. The quality was good. The other specimen was the Jonathan, which was two inches in length by two and one-half inches in width. The quality of the Jonathan was superior to that of the Winesap. Readers of Green's Fruit Grower should not confuse Winesap apple with the Stayman's Winesap. Stayman's is much larger in size than the ordinary Winesap. Stayman's Winesap is delicate in flesh, not bright red but reddish in color, and an excellent eating apple. I do not see much similarity between Stayman's Winesap and Winesap.

About Holding Wheat

Early this season the editor of Green's Fruit Grower advised his readers to hold the wheat for higher prices. This was good advice, and was based on the fact that wheat this season, owing to the large crop, was likely to sell at the opening of the market at very close to its actual cost to the producer, which is altogether too low a price. When any farm crop or any product is selling nearly at the actual cost to the producer, the producer may conclude that the price is too low.

The intervention of world-wide war has largely increased the price of wheat. This advice to hold wheat, which was given by Green's Fruit Grower in ample time, if acted upon by our readers, would probably add to the wealth of all of our readers combined to the extent of hundreds of thousands of dollars. Here you have an illustration of the value of a paper devoted to the interests of farmers and fruit growers. This publication costs you but a few cents each year, but may offer suggestions in various ways, one of which may be worth to you more than you would pay for Green's Fruit Grower during a lifetime. Do not hold grain for excessively high-prices. Do not expect apples to sell at high prices.

The Effect of European War on the Apple Market

There are many fruit growers through the country who anticipate low prices for apples this fall and winter owing to the reduced demand for apples from Europe on account of the war. While I would not advise growers to hold apples this season for high prices, my opinion is that a price can be secured for apples that will be fairly profitable, for only seven per cent. of American apples are sold in Europe on the average. But it is well to anticipate that the marketing of fruit this fall will require more than ordinary intelligence and discretion. Fruit growers must exercise these more than ordinarily in distributing fruits. There is no doubt whatever that if the apple crop of this year, which is a

good crop but not phenomenal in extent, is widely distributed throughout the country, a demand will be found for all that can be picked and barreled. The question is then, How can this fruit be distributed most successfully?

Why not advertise your apples in the local press or elsewhere, stating what varieties you have, how many barrels, the price per barrel, and the quality.

Where co-operative societies are established, distribution will be most successful. Every man cannot be expected to know where the best markets are or what the shifting conditions are in various parts of the country, the demand and the prices at which the fruit can be sold. Remember that there are large stretches of country in the United States where fruit cannot be grown, and that there are other sections where only apples of inferior quality can be grown.

One thing is certain and that is that more careful grading should be done this fall than usual. There is no question whatever that high-grade apples will sell more readily than apples poorly graded or sorted. Do not try to pack or sell the culls or poorer grades of apples. Do not bother to pick the poorer apples.

Women Not Understood

It is claimed that magazine writers and other literary people in early days, that is thirty or forty years ago, did not understand women, and that women were misrepresented in novels and other forms of literature. I can readily understand why this should be the case, for woman is even at the present day something of a mystery. Many women claim that they are not understood. I confess that I have not understood women and that I had been married over ten years before I understood my own wife.

Shakespeare has given us beautiful, lovable and heroic women, and yet it is possible that even so great a man as Shakespeare may not have thoroughly understood woman or have set her forth in literature with the proper words in her mouth and garbed with her natural impulses and feelings.

I am satisfied that young people, and I may say the average man and woman up to the age of thirty or forty years, do not realize or have a full understanding of the mysteries of sex and the laws of nature which draw mankind around us as forcibly as though they had ropes bound firmly to their necks. Pope has said that the proper study of man is mankind. How few there are of us who study human nature in either man, woman or child as we should.

Labor and Play

A great writer and thinker says that there are four essentials to a well-balanced life. These essentials are: labor, play, love and worship.

The readers of Green's Fruit Grower will concede that labor is necessary, for most of the bulk of mankind are laborers. Not all will concede it is necessary to play, yet one reason for our growing old is that we abandon play. If we would continue the games of our childhood or enter into with spirit new games in our advancing years, we would prolong our lives and ward off age. Remember that age is not a question of years, but a question of health and the preservation of vitality.

Many who possess the love of friends or kindred, of wife or husband, will question whether love is necessary to the normal life, for they are not conscious of the marvelous power of love, which is claimed to be the most wonderful thing in the world. These people have love, therefore they do not realize what their lives would be without it. Imagine for a moment the condition of a man or woman who has no kindred living, no one deeply interested in their welfare, no one to nurse them if sick, to sympathize with them in pain or grief, no one but strangers to close their eyes when death comes or follow them to the grave. Least of all will the average reader recognize the fact that worship is necessary to normal life. Many readers will say that we can get along without the church and its ministrations. This in fact is a remarkable truth that the writer I allude to has in mind, that worship is necessary. Why is it necessary?

In reply I will say that the people of this world, as far back as history goes, have been worshippers. Some of them have worshipped the sun, others the moon, others images or idols, others have worshipped the rivers and mountains. The fact that humanity has ever worshipped suggests that worship is necessary to mankind. We go to church for worship. That is we go there to recognize the Creator, the ruler of the universe, the Being who causes the world, a solid mass of rock, to float about in space without variance of time or speed as easily as a soap bubble floats in our dwelling without apparent support. Our minds rest in the thought that there is a Creator, the source of life, who caused our birth and is interested in our welfare.

What Is New Capital?

A recent writer says that the present wheat crop will bring in \$720,000,000 in brand new wealth.

After reading the above sentence, I ask, "Is there such a thing as brand new wealth?"

My answer is that gold or silver dug from the mines is in a certain sense brand new wealth, and yet there is a sense in which this mining wealth, being the product of labor, is not, as far as it is represented by labor, new wealth.

The \$720,000,000 to be received from the wheat crop this year must not be considered new wealth, for this large sum is represented most largely by labor and therefore may be termed liquefied labor. This labor expended in the production of the great wheat crop may be considered in one sense capital. If this labor had been employed in mining coal, it might have produced a sum nearly equal to the wheat crop.

Another item which enters into the wheat crop is fertility taken from the soil. Another item which should be reckoned with is the capital invested in farm lands that produce the wheat.

Have we not, then, in this \$720,000,000 wheat crop what may be termed liquefied labor, liquefied fertility and liquefied capital tied up or invested in farm lands on which the wheat is grown?

Why should we speak of this great wheat crop as new wealth any more than we should speak of the result of the typesetter, or printer, planter, carpenter, railroad engineer, or factory worker as new wealth, and yet there is a sense in which we may claim that all the products of labor are new wealth.

Tree that Pumps 260 Gallons of Water Daily

Prof. Pierce tells of a Washington elm which possesses 7,000,000 leaves exposed, a foliage surface of five acres, which gives off to the air over 6,000 quarts of water each day or 260 barrels of water every summer's day, and that this tree is located near paved streets and cement sidewalks. The question arises where does this vast amount of water come from? It is assumed that many city trees perish from lack of water owing to the water-tight pavement and water-tight sidewalks.

In answering this question it must not be forgotten that the roots of any tree, especially the elm tree, extend a long distance, thus encroaching upon the lawn soils adjacent, the sidewalks and the street. It must also be remembered that there are many subterranean springs existing in cities and towns as well as on farms. Notwithstanding these explanations we wonder at the capacity of this big tree to gather moisture to its roots, partly roofed over by city pavements. It illustrates the fact that there is much yet to be learned about root growth and tree growth generally. After being told that one tree throws into the air 260 barrels of water every summer's day we may get some idea of the reason for the coolness of the air in the forest or beneath shade trees growing in the field or upon our lawns. Shade trees are indeed more productive of coolness on a summer's day than would be a gigantic fan. Here is another argument for planting trees in addition to the usual arguments, which are the beauty and fruitfulness of trees.

Experience of a Wealthy Man

"What do you enjoy now that you did not enjoy when you were comparatively a poor man?" I asked of a wealthy friend yesterday.

"When I was poor, that is when I had to economize closely in order to keep my expenditures within my modest income, I determined to purchase all of the necessities of life no matter what the consequence might be, therefore as a poor man my family and myself were comfortably fed, housed and clothed. In answer to your question I will surprise you and many others by saying that wealth has added but little to my enjoyment of life or to my family's enjoyment of life."

"Is it a mistake then to suppose that money adds to the pleasure of living?"

"Yes, to a certain extent this is true. Almost every successful man learns at last that his accumulation of riches does not add greatly to his joy of living. When a poor man is struggling for success he thinks that success will bring him great joy, therefore he struggles desperately, finally secures the prize, but like many other prizes he finds it of less value than he anticipated or dreamed."

What then are the pleasures that a rich man may enjoy which the poor man—that is—the man in moderate circumstances, may not enjoy?

My reply is that the rich man may have more leisure, but this is not always true. Having leisure he can travel, but traveling is not so enjoyable as home life and he soon gets tired of traveling. His leisure gives him time for playing healthful games, but many rich men are so broken down in health by the time they secure their fortune they are not able to enjoy vigorous games. The rich man may have acquired a taste for art. If so, he can take much pleasure in gathering about him fine paintings, statuary, and an artistic home, both as to the interior and the grounds surrounding it, but the majority of rich men have spent so much of their time in rolling up wealth they have not acquired a taste for art or for the beautiful in nature and there-

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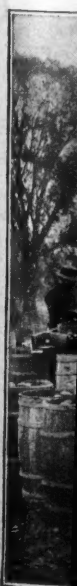
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fore cannot enjoy these blessings. The poor man, if he has the taste for beautiful objects, can see them in art galleries and other public places. The poor man may have daily communion with the beautiful objects in the rich man's grounds without costing him a penny.

The rich man can only wear one suit of clothes at a time. The dress of the rich and the poor is hardly distinguishable at this date. The rich man may have his carriage or automobile, but the man who walks is apt to enjoy life better and to be healthier than the man who rides. The rich man may have upon his table more tempting food or drinks than the poor man, but the poor man has in most cases the most vigorous digestion and the best health.

Taking it all in all, wealth which so many men chase after so desperately, is like the mirage that appears over the desert or over the lake. If great wealth is secured it is burdensome.

Farmers' Co-Operation

By GOVERNOR GLYNN of New York

There is nothing new or untried in the broad principle of co-operation. In the last analysis, co-operation is only another name for civilization. As John Stuart Mill has said: "Almost all the advantages which man possesses above the inferior animals, arise from his power of acting in combination with his fellows, and of

accomplishing by the united efforts of numbers what could not be accomplished by the detached efforts of individuals." From the dawn of history, men have co-operated to secure the benefits of safety, progress and justice, and have called that co-operation Government. They have united to produce the manifold necessities and luxuries of life and have called that co-operation Industry. They have talked together of the eternal mysteries; they have gathered together to worship the Supreme Being, and their name for this sacred co-operation is Religion. The greatest and most lasting undertakings of the human family have come in accordance with the Biblical unjunctions "Bear ye one another's burdens." "Ye are members one of another."

What has been accomplished through co-operation in other fields can be accomplished through co-operation in the field of agricultural reform. All that is needed is the intelligence to perceive the benefits to be derived, and the determination to secure these benefits. To-day there are half a hundred co-operative societies making successful progress in this State where a short year ago there were but three. The hour has struck; the time is ripe for an extension of co-operative efforts which will place New York where it belongs, in the front rank of the co-operative movement.

Our fields are fertile, our people are the peers of any in intelligence and industry. And there is no better cause in which to struggle than the cause which has for its end the easing of the burdens which press upon

the heavy laden. There is no worthier fight than the fight to secure more and better food for a people who are clamoring for relief. And those who are engaged in the good fight, who are dedicating their efforts to co-operation as the surest and wisest medium of economic progress, may well take for their motto the inspiring words, of Edward Everett Hale:

"Look up and not down, look out and not in, look forward and not back—and lend a hand."

Roadside Fruit Free to Motorist

Fresh fruit plucked from roadside trees is a pleasure motorists will be able to enjoy several years hence, when they stop for lunch in some shady nook.

From coast to coast and gulf to the border, this twentieth-century improvement on Apple-Seed Johnny is preaching the new gospel of planting fruit trees by the roadside.

In many communities civic associations, farmers' organizations and horticultural societies have promised their aid to provide free roadside fruit for the motorist.

This very pleasant idea was originated by a Southern Missouri nursery, which has placed 50,000 apple, peach, pear, plum and cherry trees along the side of the Missouri section of the National Old Trails Highway. The fruit will be free to transcontinental motorists.



Getting Apple Crop to Market

Timely Suggestions to Growers and Dealers



According to the Office of Markets of the United States Department of Agriculture, present indications are that the commercial apple crop of the United States is much larger this year than last, but less than that of 1912 by several million barrels. However, it is estimated in the current number of the Agricultural Outlook of the department that the problem of distribution will prove to be more complex than two years ago, owing to certain conditions resulting from the European war.

Attention is called to the small quantity of American apples—less than 2,000,000 barrels—taken by Europe in normal times. Both the growers and dealers are urged to view the situation with optimism and to prepare for the disposal of Europe's usual portion in other ways. It is suggested that with judicious handling, the demand at home may be increased and the commercial crop marketed with relatively fair success to all. As to just what constitutes judicious handling, the Office of Markets makes the following suggestions:

Growers should pick the fruit in uniform condition, gleaming the trees only for what is ready to come off, repeating the process until the crop is harvested. The advantage is to secure a longer time for distribution and to prevent the pack from representing extreme stages of maturity ranging from ripe to green.

From Orchard to Car

When picked, the fruit should be handled from orchard to cars in such a way as to prevent deterioration, care being exercised to protect the apples from the elements. It is explained that under proper con-



On the way to cold storage

ditions, fruit which is picked to-day should not be packed until to-morrow, and that for this purpose shelter should be provided.

Those using the barrel package should uniformly grade and pack the crop in compliance with the Sulzer law and brand in accordance with its provisions, for the purpose of creating a feeling of confidence among dealers and consumers.

Inferior grades should be eliminated from the green fruit markets, not only for the reason that the demand for such grades will be very limited, but also because their presence in the markets will undoubtedly hamper profitable disposition of the better fruit.

All apple growers, operators, dealers and associations should early arrive at an estimate of true values in order to secure a quick movement. It is explained that if arbitrarily high prices rule in the beginning of the season, the crop will not pass readily into consumption, but that on the other hand, abnormal accumulation and congestion will occur throughout the channels of trade, with disastrous results to all concerned.

Packing for Cold Storage

Only standard varieties well packed should be placed in cold storage, for the reason that prices likely to rule in the late fall and early winter, as the inevitable result of liberal offerings of common storage stock, will probably limit the demand for cold-storage apples until midwinter.

An effort should be made to fully supply small towns by direct sales in order to secure a more uniform distribution and avoid congesting the large markets. Attention is called to the practice of some sections of growers who go with cars of apples to poorly supplied towns and sell on the track. Growers or dealers who desire to use this system should apply to the town and railroad authorities for information as to regulations controlling such sales, and, if conditions justify shipping, the arrival of the car should be preceded by judicious advertising.

Growers who live in communities where co-operative organizations are operated should do all possible to strengthen these exchanges. It is asserted that the dis-

loyalty of members is the chief element of failure in co-operative enterprises, and growers are strongly urged to support their association as the best way to effect satisfactory distribution.

Shipments to Latin America

American apple shippers are advised to stimulate the demand and increase their shipments to Latin America and the Orient. It is suggested that by co-operating with the Department of Commerce extension of trade in this respect can be accomplished. Inquiries relating to these countries should be addressed to the Bureau of Foreign and Domestic Commerce, Washington, D. C.

Shippers are urged to apply to the superintendent of documents for the following publications, issued by that bureau which may be secured at the prices shown: Special Agents Series, No. 62, 30 cents; No. 72, 10 cents, and No. 81, 25 cents. Special Consular Reports, No. 62, 10 cents, and Tariff Series, No. 19, 5 cents. Remittances should be in cash or by money order. Stamps are not accepted. Attention is called to an announcement of the Department of Commerce that it will aid in every practicable way.

For the benefit of those who may not be disposed to exercise especial care in handling the crop, on the grounds that it will not be worth while, the Office of Markets suggests it as probably being true of this year, that not only proper handling but also great diligence will be required for effecting satisfactory distribution.



Sorting Apples



Packed and branded in accordance with the Sulzer law

Seasonable Fruit Helps

Bird Houses.

There has recently been issued by the Biological Survey at Washington, D. C., a very interesting and instructive pamphlet on the subject of bird houses. It is listed as Farmer's Bulletin No. 609 and may be had free of cost on application to the Department of Agriculture. It tells how to make many kinds of the little houses that birds are glad to make use of for building their nests and in which they can rear their young. It is the wild birds that these houses are intended for, and not the troublesome and useless English sparrows that are numerous in many places. They deserve killing, and there is nothing that drives them away more quickly than shooting, which can be done safely in small towns and at country places.

The wild birds are about all of them not only harmless but decidedly useful to the fruit grower, farmer and gardener. And they are not usually very shy or afraid to build their nests near the habitations of man if he shows them no hostility. All that most of them need is trees and bushes in which to harbor themselves and their young from the hawks and other enemies. Cats are harmful to birds and often really do more harm in this way than they do good in catching mice and rats.

But there are some of the most valuable insect eating birds that prefer houses to trees in which to make their nests, and we can do them a lot of good and also help ourselves by fixing places for them. They need not be expensive nor troublesome to make. The pamphlet mentioned shows pictures and plans of a variety of bird houses and shelters. Some are quickly made from old tin cans nailed or wired to posts or stubs of tree branches. Others are made of hollow tree trunks sawed into sections and the ends closed, except a hole for the birds to pass through. Gourds make fine bird houses by cutting a hole in each one and fastening them where there will be no damage from cats. Butts of shingles or any small scraps of lumber may be formed into very neat little boxes and, if painted in gray, green or other natural colors, look pretty and make snug bird houses.

Let the boys and girls try this artful and happy way of inducing their busy and cheerful feathered friends to live near them. They will catch millions of the enemies of the crops and do almost no harm in return. They will sing and twitter in their own quaint ways while they flit from tree to tree, and he who is deaf to this interesting bird lore must be lacking in his make-up and is missing one of the pleasures of life. I will always remember with delight the songs of the wrens that built their nests under our porch roofs and the red birds in the cedar trees in our yard. When I lay in Garfield Hospital last May, after a surgical operation, the blackbirds cheered me by their chirping and feeding their young on a tree near my window. Father and mother quietly lie in their last, long sleep, and ere long I will join them, but the birds will sing on while the world stands, and it is fitting that we should do what we can to help them rear their young, multiply their numbers and sing their sweet songs for the children of the generations to come.—H. E. Van Deman.

Answers to Inquiries

Price of Apples

What do you think of the prospect of fair prices for winter apples this year considering the European war? Do you think American nurserymen will get the stocks or seedlings they have ordered from French growers this season?

Reply: From present indications it seems that apples will be rather low in price the coming fall and winter and perhaps next spring also. It is doubtful about the French being able to dig and ship the seedlings they have grown for our nurserymen.

When to Barrel Apples

Do you favor barreling apples immediately after picking, in preference to piling them in the orchard? Will they

color as well in the barrel as in piles? My experience is that they will color just as well in barrels as they will in the orchard, but not so quickly.

Reply: Winter apples should be barreled as soon as gathered and put in the coolest place possible to find, cold storage being the best. If gathered and put in piles in the orchard they will ripen much faster than when on the trees or if stored in a cool place. Covering apple piles with some protecting material like straw will prevent the sunshine from affecting to some extent, but they should be hurried into good storage as soon as is possible.

Fruit in Southern Ohio

Prof. Van Deman:—Please tell us several of the best apples, peaches, pears, plums and cherries to plant for home use in southern Ohio. Also when is the best time to plant peach seeds and how deep? Are there any varieties that are more apt than others to produce fruit of the same kind from seed. I have heard that the Elberta peach will do so, the only difference being that sometimes they are clings and sometimes free stones. Is this correct?—L. P. M., Ohio.

Reply: It is true that some varieties of fruits are more apt to produce seedlings that are like the parents than others, and the Elberta peach is one of them, but it is not wise to depend on seedlings of any kind.

A good list of fruits for family use is as follows: Apples—Early Harvest, Fanny, Golden Sweet, Jefferies, Chenango, Fall Pippin, Grimes, Jonathan, Rome Beauty, Stayman, Ensee, York Imperial. Of pears the Wilder, Tyson, Seckel, Bartlett, Sheldon and Lawrence. Peaches, Triumph, Mountain Rose, Belle of Georgia, Champion, Elberta and Salway. Of plums, Burbank, Kelso, DeSoto, Lombard and German Prune. Of cherries plant the Richmond, Montmorency and English Morello.

Peach seeds should be planted in November and about three inches deep.

The Supreme Bartlett Pear.

Prof. H. E. Van Deman:—I am eating the Bartlett daily and find it delicious. It seems to me ideal in shape and color. Tell us all you know about the Bartlett. How does the Bartlett keep in cold storage? I picked some of my Bartletts a month ago. Other Bartletts I picked two weeks ago. Some are still on the trees, September 15th, in prime condition and not soft, while those picked two weeks ago are just ready for eating. Is not this remarkable in an early pear? The trees I refer to are dwarf Bartlett pear trees, but it does equally well or even better on standard trees with me. As I understand, it is of foreign origin. Do you know about the date it was introduced into this country? If you were planting an orchard of 1000 pear trees how many of these trees would be Bartlett? I find it is a good shipping pear, standing up well when picked green. As an admirer of color I can think of no more beautiful yellow tint than that of the Bartlett pear.—B.

Reply: The Bartlett pear originated in Berkshire, England, about 1770 and was propagated by a man named Williams of London, who gave it the name Bonchretien, and the public called it Williams' Bonchretien in that country and is to this day. The variety was soon brought to this country, perhaps about 1800 or before and the name was lost, but it was cultivated and distributed by Enoch Bartlett of Dorchester, Massachusetts, now a part of Boston. The oldest known tree, which is claimed to be the first one imported, stands there yet, and I have eaten fruit that grew on it. Not knowing the English name, the variety was given the name Bartlett, and this is used entirely now in America and to a large extent in other parts of the world. It is the most popular and perhaps the most valuable pear known, because of its

general good qualities. The tree bears well, but is quite subject to blight, as are most other varieties. The fruit is beautiful and delicious in flavor and stands shipping and handling in the markets remarkably well. It also endures storage better than most pears. In planting an orchard of 100 or 1000 pear trees half or more of them should be Bartlett.

When to Plant Acorns and Nuts

Prof. Van Deman:—Please tell me how and when to plant hickory nuts and oak acorns. I have planted both and can't get them to come up. Will you please tell me all about raising oak and all kinds of hard timber as I am an Idaho farmer and greatly interested in fruit and shade trees.—Lawson Pilant, Ida.

Reply: Hickory nuts and acorns are not hard to get started into growth if they are kept moist from the time they are gathered. The best way to handle them is to put them in boxes of damp sand and bury these in the soil where they will never get dry nor be troubled by mice or rats. Cover with wire screens and have the top so the rains and snows can fall on the soil on top of them. When early spring comes on, plant them in nursery rows or where the trees are to stand permanently. It is not reasonable to expect these trees to grow fast. One of the best forest trees for Idaho is the yellow locust, for it grows well there and is one of the best trees for posts or other uses known.

Apple and Pear Trouble

Prof. H. E. Van Deman:—I have in my garden a N. W. Greening apple tree that bears an abundant crop of large and fine looking apples each year, but they are full of corky places that spoil the fruit.

I spray with Bordeaux mixture four or five times a season. As the tree is in my potato field, I use the same spray as for potatoes. What can be done? Would grafting to some other variety make any difference?

2nd—I have a Sheldon pear tree that sets fruit in abundance each season, but all drop off when about the size of a bean. This tree is in an old rich garden. What is the cause and what the remedy?—F. N. Briggs, Vt.

Reply: It is not a very common fault of the Northwestern Greening apple to have dark and corky specks in its flesh, but in some sections this does occur. There is no spray that will prevent it nor do I know of any way to prevent the trouble. It is not a fungous disease, but an internal trouble that causes the cells to die in little spots, and thus the spots are formed. Only a few varieties are so affected, Baldwin being one of them. Grafting over the tree to some other kind not having this fault would remedy the difficulty. Delicious would be a good one to use in grafting.

Ripening Winter Pears

What can you suggest about the storage of winter pears? I have trouble in ripening Wimper Nelis and Josephine. They seem to ripen too slowly.—C. G.

Reply: Winter pears should be stored the same as winter apples, and when any or all of them are needed to use, they should be put in a warm, dark room and this will ripen them.

The Williams Apple

Green's Fruit Grower:—Can Prof. Van Deman or any of your readers give me information about the Williams apple? Are the trees thrifty and are they annual bearers? Would it do well on a stony, dry, limestone soil and on hilly land? McIntosh, Wolf River and most all varieties do well here. Is it all right for a commercial orchard? It is quoted high in market. I have faith in good fall varieties, as there are so many winter trees being set.

Would it be injurious to trees one year old to put the Veneer Hawkeye tree protectors on them and leave them on all summer and winter until they are five years old?—Edwin Rickard, N. Y.

Reply: Williams is a midsummer apple that is very red and attractive in market and for that season will pay to grow commercially. The trees will flourish where other kinds do well, and I would not hesitate to plant them on the same character of land.

If there is nothing injurious, such as coal tar or other chemical substances in the tree protectors mentioned, there is no danger of injuring the trees by leaving them on all the year. Plain wooden veneer is harmless.

Potash as a Fertilizer.

Editor Green's Fruit Grower:—I noticed in the "Grower" for July under the caption "Potash as a Fertilizer," Mr. C. A. Green was asked: "If you dig a circle around a fruit tree and put in the contents of a can of Babbitt's potash will it make the tree more productive?"

And you reply: "I think this would be a good thing to do. It is a well known fact that an application of potash will make a tree more productive, the fruit larger and of more color."

I have a large orchard and am anxious to improve same. I am informed by a friend that Babbitt's lye is a sodium lye and not a potash lye, and only recently my informant stated that the Government has ruled that the word "potash" must be removed from the Babbitt's label, and the Babbitt people have agreed to do this. Now, under the circumstances do you not believe that you owe to your subscriber to give him the real facts in the case?—J. Bishop, Kans.

Reply: On consulting one of the soil chemists of the U. S. Department of Agriculture he assures me that "Babbitt's lye" does not contain potash, but sodium for its solvent properties in removing grease and dirt from clothing and other things. It is, therefore, of no value as a fertilizer for trees or plants, and besides, it would be very expensive if it could be so used. There are forms of potash sold in the markets that are cheap and effective as fertilizers, muriate and sulfate of potash being the most valuable. But the soils of Kansas are naturally well supplied with potash and it is very rarely necessary to add it to them in any form. What is needed more than anything else there is nitrogen, and that should be contained in humus to loosen and aerate the soil at the same time. Moisture is one of the great needs of Kansas soils, and by applying stable manure wherever it is obtainable, and growing clover, or almost any crop that will make humus when rotted on or in the ground, both fertility and soil moisture will be increased. Frequent, shallow culture will also be a very great help in conserving moisture and growing healthy trees and good crops of fruit.

Florida Questions and Pecans

Prof. H. E. Van Deman:—As I am a subscriber of Green's Fruit Grower, I generally find your article and replies very interesting and instructive.

I also read your article on "A Glimpse of the Everglades" that appeared in the April issue of 1913, and I note from that and other articles that you are fairly well acquainted with the various fruit growing sections of the State, the quality and condition of the soil, varieties of trees best adapted to such soils, etc.

What part of the State do you consider the best adapted to orange and grape fruit? I realize that the State is large and there are many favored spots. I know of some parties who have secured some land near Groveland (formerly Taylorville), in Lake Co., and as this one party is very conservative, has been a truck farmer here, he is very highly impressed with the condition of the soil, the lay of the land, elevation, and the lakes that abound in that part of the State. They expect to plant part of the land to oranges and grapefruit this fall or winter; the rest has not yet been cleared;

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there is considerable oak on it, which in this county and in Wisconsin is considered the best soil.

Do you think Polk Co. is better? What variety of oranges and grapefruit do you recommend for planting? Do you consider the Parson Brown a good one? And I understand that a certain Chinese has introduced a new variety which is thought to be a choice strain. What is the usual price for a first class, one-year old orange and grapefruit tree of the best variety?

I have also noted that you have been interested in pecan culture, and I infer that you are well posted on what can be done, the best varieties, etc. It is claimed that the pecan does well in the region above referred to in Lake Co. What is the best variety of the "paper-shell" kind? I have the U. S. bulletin on "The Pecan," but the information given is too "general." It mentions as many as sixty or more varieties, but does not recommend any particular one; possibly the location has something to do with it. I also note it mentions a variety under your name, saying that it is of large size, shell of medium thickness, quality rich; very popular until recently, when it developed scab—serious in some sections. I also note that many of the varieties named are shy bearers and a great many have thick to hard shells.—E. L. Nolting.

Reply: Replying to your questions have to say that Lake County, Florida, is subject to periodical freezes that are likely to ruin the citrus trees and cause great loss at any time. I would advise going much farther south, Manatee County for instance.

Parson Brown is a very early orange, but not the best for market. Pineapple is one of the best. Lee Jun Song is the new and very late variety that ripens almost in the early fall and is a good one.

Pecans grow and bear well in northern Florida, but not where citrus trees do best. Curtis is one of the best for that state, also President. Van Deman has faults, but is one of the most popular and reliable.—H. E. Van Deman.

Prunes and Plums

Prof. H. E. Van Deman:—I read your article on plums in the August number, and agree with you about the Asiatic plums. I have three—Burbank, Satsuma and Kelsey. They grow fairly well, but as you say, they have a peculiar flavor. Can you tell me if the Eastern plums would not do well here in southern California, such as Bradshaw, Lombard, Golden Drop, Imperial Gage, Jefferson, Bavay, McLaughlin and a few others? I want to get about a dozen trees, and could they be sent through the mail?—William Andersen, California.

Reply: All the plums of the European type, which includes the varieties mentioned, do well in California. Indeed, they are there free from the curculio and rot which damage them very badly in the Eastern States.—H. E. Van Deman.

English Walnuts in Wyoming.

Prof. Van Deman:—I have read much about English walnuts and wish to know if they would do well in northern Mississippi about fifty-nine miles southeast of Memphis, Tenn., 500 feet above sea level. The land is hilly, not very rich and is sandy, clay soil. Do you think they would do well in Louisiana?—Mrs. Fred Green, Wyo.

Reply: It is certain that the Persian (English) walnut will succeed well in that part of Mississippi inquired after, especially on the uplands. How it will do in the bottom lands is not so well known, as it may be subject to blight. This I found to be the main trouble with it in the low land in Louisiana. It does best on rich land, but it should be well drained and therefore the more hilly uplands of the south are better suited to its culture than the low bottoms.

The trees should be set fifty feet apart and given good culture. None but budded or grafted trees, on native walnut stocks, should be planted, unless they cannot be bought, for seedlings do not come true to the parent tree. But there are nurseries that have both for sale. They have only lately learned how to bud and graft the walnut. Our common wild walnuts make excellent stocks for the foreign species.

GREEN'S FRUIT GROWER.

The Oldest Fruit Journal in America

GREEN'S FRUIT GROWER CO., Publishers
C. A. GREEN, Pres. and Treas. R. E. BURLING, Vice-Pres. and Mgr. M. H. GREEN, Sec'y.
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Subscribers who change their residence will please notify this office, giving old and new addresses.

Entered at Rochester (N. Y.) Post Office as second class mail matter.

English Walnuts

Prof. H. E. Van Deman:—Can you supply us with information regarding the growing of Persian walnuts? I would like to know some of the difficulties we would be apt to encounter, and other information regarding fertilization, soil, etc. Thanking you in advance for any information I am, W. B. Durvee, Jr., N. J.

Reply: There is nothing very serious to interfere with the culture of Persian walnuts in New Jersey and other regions of similar climate. There are many bearing trees in that State, and some of them are very old and of large size. They are all seedlings, except a very few of recent planting, and therefore they vary greatly in the character of their nuts and in productiveness just as the seedlings of other kinds of trees do. Some of them bear well, and their nuts are very good, but many are not so, and in many cases the trees are solitary and their flowers do not bloom together and therefore do not set into fruit. This is one of the main troubles with the seedling trees of this nut, for the male and female flowers are borne separately, and if one comes out too soon, as often occurs with the male flowers, the pollen cannot fertilize the female bloom. But there are trees that have all the good points, and these are the ones to propagate by budding and grafting. This is being done by a few nurseries and it is now possible to get very good trees that are as sure to bear good nuts in the Eastern States as those of the Pacific coast. The varieties thus propagated for Eastern planting are those originating there, mainly in Pennsylvania and New York, and there is no danger of them failing from being too tender, which is the case with some well known varieties. Our native walnuts have been found to make excellent stocks on which to work them and are being used by the nurserymen.

There is a disease or blight that affects the Persian walnut, often killing the tender branches and also the nut while growing, but it has not yet become troublesome in the Eastern States and may not be a menace to walnut growing as it is in California. However it is not so bad as to prevent the profitable culture of this nut, except in rare cases. The trees should be set fifty feet apart or even farther, for they attain large size and live to be very old, even a century and more. Some strains of seedlings are worthy of planting, but grafted trees of the best named varieties are decidedly better and should be planted. The Rush, Pomeroy, Hall, Nebo and Holden are all of good character in both nut and tree.

Stanley, Va., Aug. 24, 1914.

Mr. C. A. Green:—Green's Fruit Grower is the best paper of all the fruit journals that come to my desk. One gets the essence in a nutshell, fresh and fine just off the vine.

I have just finished harvesting my Elberta peaches. They are the admiration of peach lovers for miles around. Chas. E. Manor.

Thanksgiving

Written for Green's Fruit Grower by B. F. M. Sours

Joy, joy is ours, while autumn winds are blowing,
While o'er the vales the fields are bleak and bare;
Great joy is ours, for heart and song are telling
Deep stores of gladness, joy for hearts at prayer.

Love overbends, while all around is singing,
Bending the skies to shower the blessings down;
Angels look down, their harps with sweet chords
wining,
As of glad dreams of my eternal crown.

Day of Thanksgiving, golden pumpkins nestle
Safe in the bins, and full of every good
Are the rich guarded stores of gathered harvest,
Kept for a winter's gladness and its food.

Thanksgiving Day, O day of days, rejoicing,
Bringing our hearts in homage to our King,
Thee we would cling to, till the whole Creation
Joins in the song our happy spirits sing.

Adventitious Buds

If you go into the woods and dig a maple, an elm or almost any kind of a tree that may be but a rooted pole 16 feet high, and cut off the top of the tree, leaving simply a bare pole above the roots 6 or 8 feet high, without a branch, and transplant this tree at the proper season, a large number of shoots will start out through the bark of this tree, and these new shoots will form a new top, notwithstanding the fact that if you had examined the trunk of this tree carefully you would have seen no signs of any buds there.

These branches appearing where seemingly there were no buds, were produced by buds present in the bodies of trees under the bark, which do not begin active growth and do not force themselves through the bark unless there is occasion for their growth or need of their growth, as there would be in case the top of the tree were burned off, or cut off as I have indicated.

These unseen buds lying inside the bark of most trees render it possible for the fruit grower or gardener to shape trees in any manner desired. If he wants a low-branching tree he can dehorn it at a low point. If he desires a moderately high head he can leave the branches longer when amputated. If he desires a very high topped tree he can omit cutting them back altogether.

These adventitious buds are of such great interest and great value to every tree grower I urge readers of Green's Fruit Grower to experiment with them by cutting back severely the branches of certain trees, or by removing the branches altogether during the season when there is no foliage present, that is during the dormant season.

I have on the grounds surrounding my home an elm tree twenty years old which was attacked by the borer and seemed to be about to perish. In March I dehorned this tree, that is I cut off all the branches, leaving simply stubs of branches three or four feet long, each branch being larger than my arm, almost as large as my leg. The cutting back of this tree was so severe there was scarcely a twig left, and yet that season the adventitious buds started out freely through the stubs of branches, and to-day this elm tree is one of the most beautiful on my grounds, being low-

headed and densely headed. You will see therefore that if you have a tree upon your place that is ungainly in shape and appearance, through some accident or otherwise, you can make it shapely and beautiful by dehorning it as I have indicated.

These adventitious buds spoken of indicate the resourcefulness of nature in providing for the life of plants, trees and vines in the face of misfortune. Supposing the top of a young tree is demolished by the falling of a larger tree upon it, or supposing a tree is struck by lightning and shattered. The adventitious buds will start out, and the tree, which without these adventitious buds would have perished, may soon be seen to thrive and ultimately make a fine specimen.—C. A. Green.

Note by Prof. Van Deman: Adventitious buds are formed out of the cells of the callous formation and are not regularly formed buds that have been submerged by wood growth and lie there ready for emergencies.

The Best Protection for the Strawberry Bed

Written for Green's Fruit Grower by John E. Taylor

The best artificial protection found available for a strawberry bed is evergreen boughs or little evergreen trees. The little trees from three to twelve feet tall are the better, as they are great to catch and hold the snow. To make them lay where they are put, trim off the limbs from one side and lay that side down next the ground. Cover both upland and lowland patches with this material; but before this is put on the lowland patch cover between rows with salt hay or straw. This is to hold the plants back somewhat so that they will fruit a little later than if covered with boughs alone. In the spring, just as soon as the freezing nights are over, when the green foliage begins to life up, take off the covering from the upland plot and sow on one-fourth ton of potato fertilizer just before a rain; and then cultivate lightly once a week until well into blossoming time; then put on one ton of straw, working it well up under the sides of the rows of plants. On the lowland plots leave the brush on about two weeks later, when it is taken off and phosphate put on as on the other, only there is no cultivation or disturbing of the hay or straw mulch, something which would induce early fruiting, just what is not wanted.

FOUND OUT

A Trained Nurse Discovered Its Effect

No one is in better position to know the value of food and drink than a trained nurse.

Speaking of coffee a nurse in Pa. writes: "I used to drink strong coffee myself, and suffered greatly from headaches and indigestion."

"While on a visit to my brothers I had a good chance to try Postum, for they drank it altogether in place of coffee. After using Postum two weeks I found I was much benefited and finally my headaches disappeared and also the indigestion."

"Naturally I have since used Postum among my patients, and have noticed a marked benefit where coffee has been left off and Postum used."

"I observe a curious fact about Postum when used by mothers. It greatly helps the flow of milk in cases where coffee is inclined to dry it up and where tea causes nervousness."

"I find trouble in getting servants to make Postum properly. But when it is prepared according to directions on package and served hot with cream, it is certainly a delicious beverage."

Name given by Postum Co., Battle Creek, Mich. Read "The Road to Wellville," in pkgs.

Postum comes in two forms:
Regular Postum—must be well boiled. 15c and 25c packages.

Instant Postum—is a soluble powder. A teaspoonful dissolves quickly in a cup of hot water and, with cream and sugar, makes a delicious beverage instantly. 30c and 50c tins.

The cost per cup of both kinds is about the same.

"There's a Reason" for Postum.
—sold by Grocers.

Notes From Green's Fruit Farm

THAT little Columbian raspberry patch of which I have written before (there are 8 rows 375 feet in length) gave us 1,408 quarts of berries the past season; it also yielded several thousands of good tip plants again last spring and the young canes are tipped again. This patch yielded 1,408 quarts the season of 1913, and 1,536 quarts the season of 1912, and in addition produced last season a lot of strong tip plants. Some profit in growing raspberries, you will say, especially when you are told that not a quart of this fruit was sold at less than ten cents.

A two-acre patch of strawberries that was set out during the last few days of September, 1913, is a sight for sore eyes. The rows were 4 feet apart and the plants set 20 to 24 inches in the rows. The plants were covered lightly in December. In the early spring the covering was raked off and cultivation commenced. As soon as growth commenced, a liberal dressing of a home mixed fertilizer was scattered along the rows, made up of nitrate of soda, muriate of potash and phosphoric acid. To-day, the plants meet in the rows. One visitor from out of the State remarked that he had seen many acres of strawberry plants annually for the past 30 years, but "that beat them all," and when told that the plants were not set until about October 1st, he was simply amazed. There are several good blackberries being grown extensively. The Snyder, the Eldorado and the Blowers I believe are worthy of all that is said of them, but one that I discovered in the woods twenty-two years ago this summer beats them all as far as the fruit goes. The trouble with it is that it is not quite as hardy as the ones named above. This woodland berry is large and, if a blackberry could be coreless, this is the nearest to it.

Both the chickens.—The rows of grapes near the house came into bearing finely this season, but I discovered this morning that the chickens that I had been petting all summer knew more about the fruiting quality of these grapes than I did. Lucile, Worden, Niagara and Concord had all suffered badly. To-night there will be a chicken raid. To-morrow grapes will not be on the chickens' menu card.

Tons upon tons of rock have been taken out of the place the past six months. One man has this in charge. As soon as a rock is located, the spot is marked, and soon this man is seen with his pick, iron bar, spade and basket containing dynamite fuse and caps, on his way there, and it is only a matter of minutes (according to the size and the depth of the rock) before a report is heard and we realize that no more plow points will be broken on that rock. It is estimated that on the old farm and the one recently acquired we have blown out 100 tons during the summer. Some one asks, "Isn't it a dangerous work?" We do not find it so. Our man is much interested in the work and would rather do it than eat a tough beefsteak. The only mishap noted was the splintering of a spade handle which happened to be left near one rock when the blast was made.

The Diploma currant is a great favorite with us, for it is a good grower and a producer of large showy fruit, which attracts attention quickly on the market. To-day, September 14th, I see that there are some nice clusters of fruit still hanging on 2-year-old bushes, which, considering the extremely long spell of dry weather, followed by two or three weeks of heavy showery weather, is another good reason why we should still consider it one of the best, if not the best, red currant.—E. H. Burson.

Sawdust for Packing Grapes

Heretofore in shipping grapes long distances across the ocean or across the continent, cork waste has been used successfully, but cork waste being expensive, California fruit growers have recently discovered that the sawdust from the great redwood trees of California furnishes a packing material nearly, if not

quite, equal to the cork waste and very much cheaper.

At Green's Fruit Farm we have found that any kind of sawdust is a good material in which to pack grapes or other fruit for long keeping, but if the sawdust is odorous the odor will affect the fruit. Where sawdust is used, it must be perfectly dry before packing fruit in it.

There seems to be no difficulty in shipping grapes short distances in five or ten pound baskets, provided the baskets are handled with care and not thrown around as expressmen sometimes handle trunks.

My Walk in the Fruit Garden

Every morning I delight to walk out among my fruits and fruit garden which is located near my home. Grapes never

ant it would be for the owner to step out of this house in the cool of the morning and pick from these peach trees a basket of the delicious and beautifully tinted fruit to be eaten by his family and himself at the breakfast table. And what would these eight trees cost? They could be bought for a dollar.

The Banana Apple is the most beautiful apple that is grown. No doubt about it. Mr. John Ball of Caledonia, a well and widely known business man and produce dealer, in our office this morning, October 15, says: "I have bought, handled, or seen handled thousands upon thousands of barrels of apples, but with all my buying, handling or seeing I have never come across anything like these Winter Bananas for beauty and attractiveness. I would like to buy

of the season. Of late years I see, or think I can see, a diminished yield of the crop of strawberries.

Some may say that my view is not correct, that I have not an accurate vision of the crops of former days and that I belittle the strawberry crop of to-day. But I can reinforce my opinion by a glance at the prices paid for strawberries in the markets to-day as compared with the prices of former days. Thirty or thirty-five years ago, though the price for the first berries in the market may have been eight to ten cents, the price rapidly declined, owing to the abundant yield of this fruit, so that in the rush season, midway between the opening and the closing of the season, strawberries were often sold at four cents a quart or even at lower prices. At the present time canning houses and other large buyers of



Blenheim Orange Apple. Early winter. Productive and best paying apple at Green's Fruit Farm.

taste so well as when picked cool and fresh from the vines with the morning dew upon them. The same may be said of the strawberry and raspberry. No fruit should be eaten unless cold. A warm melon, pear or apple is not naturally so appetizing as a cool one.

This morning I walked among the pear trees in the dwarf pear hedge running through my garden and noticed that where I had cut off in July the new growth that was made last season, many pears appeared abundantly in clusters. There was one cluster of 18 pears, another of 10, another of 6, etc., on the Bartlett-Seckel pear tree. I commend with great confidence the cutting off of the new growth in July. If not done in early summer, it may be done during the winter months, but cannot have such prompt effect as though done in early summer.

While journeying on the cars recently, my attention was called to eight beautiful peach trees which had been planted three or four years previous in the back yard of a village residence. These trees were beautiful and attractive of themselves, embellishing the yard. But further than this I could not help thinking how pleas-

ant it would be for the owner to step out of this house in the cool of the morning and pick from these peach trees a basket

of the delicious and beautifully tinted fruit to be eaten by his family and himself at the breakfast table. And what would these eight trees cost? They could be bought for a dollar.

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A Decline in the Productiveness of Strawberries

I have been a grower of strawberries for nearly a lifetime. In looking back over the crops of this delicious fruit which I was growing thirty or more years ago, I see the beds and plantations loaded down with large and beautiful fruit which continued to hold out in size to the end

of the season. Of late years I see, or think I can see, a diminished yield of the crop of strawberries.

Some may say that my view is not correct, that I have not an accurate vision of the crops of former days and that I belittle the strawberry crop of to-day. But I can reinforce my opinion by a glance at the prices paid for strawberries in the markets to-day as compared with the prices of former days. Thirty or thirty-five years ago, though the price for the first berries in the market may have been eight to ten cents, the price rapidly declined, owing to the abundant yield of this fruit, so that in the rush season, midway between the opening and the closing of the season, strawberries were often sold at four cents a quart or even at lower prices. At the present time canning houses and other large buyers of

What cause can be assigned for the reduced yield of strawberries? The plantations received as good care as formerly, or even better. Knowledge of the essentials of strawberry growing has been widely disseminated. Strawberry growers should be in better position to grow large crops of strawberries than ever before. We know more about necessary fertilizers for strawberries and the necessity of winter protection.

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my home supply berry bed in the city of Rochester, vigorous growing varieties would continue in profitable bearing for three to five years. I find of late years the old beds do not bear so long or so well as they did in past years. Near the office of Green's Fruit Grower I had a bed of strawberries which had borne for two years. It was given good attention, protected during the winter with straw manure and was in a thrifty condition when winter set in last fall. It also looked well and thrifty when the season opened this spring. The plants blossomed freely. But immediately after blossoming the bed seemed to go backward instead of forward. The leaves were not large and vigorous. Finally one end of the plantation died out entirely, and in the other part growth was so feeble I ordered the plantation plowed under without picking any fruit. I looked in vain for a cause for this rapid decline in an old bed of strawberries in a variety that is ordinarily productive and long-lived. Something in the soil or in the plants themselves must be to blame for this decline in strawberry vigor and productiveness.

There is another possible cause for unproductiveness. Every year many new varieties of strawberries have been introduced. Every year for the past thirty or forty years valuable old varieties have been abandoned for these newer varieties. I have in mind such excellent varieties and great yielders as the Sharpless, Charles Downing, Wilson, Crescent (though rather small), Triumph de Gand, and others. Is it not possible that we have been too hasty in discarding varieties of strawberries which had proved to be remarkably valuable, hoping to get new varieties that were more valuable, but which are lacking in some respects the good qualities of the old varieties that have been allowed to disappear from the face of the earth?

California Fruit Growing

Green's Fruit Grower:—For several years, first in southern Ohio and later in southern California, Green's Fruit Grower has been a regular visitor. We often smile at some item contained; for instance, it seems strange to get advice as to the best methods to keep fruit from freezing, and how best to proceed to thaw out the pump in a climate where last winter we did not have frost enough to kill tomato vines. Our vines planted in May, 1913, are still green, but did not produce the second crop of fruit that we had hoped for, though I picked ripe tomatoes as late as January.

This was an exceptionally mild winter. No smudge fires were lighted in the citrus groves, though every orange and lemon grower had each tree guarded by two smudge pots, one on each side of the tree, each pot filled with oil and ready for the torch, which, I have said, was not needed. However, the winter of 1912-1913 was one of the opposite extreme, and in January, 1913, we had one of the most disastrous cold snaps ever known of here. Ice formed and remained without thawing for more than three days. Orange and lemon groves resembled and, in fact, were great battle-fields—the growers fighting desperately to save their crops. Great clouds of dense smoke from the smudge fires enveloped the country, entering homes, stores, etc. The damage done to the crop includes to some extent the crop now being harvested as the trees had not yet recovered from the shock when this crop was starting, but are now fully recovered and loaded with little green oranges the size of crab apples. At the same time many trees are still loaded with ripe fruit. Orange picking began in January and is still going on. The cold, of course, did not injure apricots, peaches, etc. At the time of our cold snap I had a letter from a brother in Ohio. He said they were having a mild winter, almost like summer, and named the temperature. I do not remember what it was, but it was just the same as we were having, and we considered it record-breaking cold weather.

When I first came here five years ago, I was surprised to learn that two states so widely separated by distance and climatic differences as New York and California should rank first and second, respectively, in the production of one crop—grapes. Fresno county, in central California, claims the world's record for a single shipment of raisins—100 car-

loads, containing 1,250 tons of raisins, valued at \$150,000. This shipment was made a few days ago. Some people claim that should we vote the state dry in November—and we are going to do it—the grape industry would be ruined. The figures above show how foolish is such an argument.

Apricots were dried more than a month ago. While the crop was heavy and the trees loaded to the breaking-point, the fruit was small, due mostly to failure to trim the trees and thin out the fruit where the trees were overloaded. Though the cots grow to perfection here, the process of drying is often interfered with by foggy weather, and for this reason the dried product is not always classed "A" fruit. One packing house reports 500 tons of dried apricots. The pits (or stones as we say in Ohio) can be sold for about \$20 per ton, and are used in various ways: The inside kernel is used in the manufacture of glue, in making flavoring, and some are exported to Germany where it is used in making an imitation of almond oil. The outside shell is sold for fuel, and a shovelful in the stove or grate will make a hot fire. One cannery reports 1,500 tons of peaches this year; our barley and hay crop was in the neighborhood of 275,000 tons.

Bean harvest is going on at the great San Joaquin ranch, where 26,000 acres of lima beans are being out and piled to dry. Six bean rows make one pile row, and a row will sometimes be a mile long. In another week nine threshing outfits will be at work gathering and threshing the big crop. This crop grows without irrigation—and has no rainfall from planting to harvest. As water is developed for this land, more fruit trees are planted and the bean crop becomes correspondingly less, as there is no other crop to compare with fruit or walnuts where water is available.

Walnuts are just beginning to drop from the trees, and soon the small boy, and the big one too, can gather walnuts to his heart's content. The crop is now threshed from the hulls, thus the tedious job of hulling by hand is done away with.

Orange county has five sugar factories running day and night and, with war-time prices prevailing, the future looks good for the factories, though the growers will have to wait another year for their share of the benefits, as this crop was sold under contract at a stated price, which cannot be changed.

Some foot-hill ranches report that deer are so numerous as to be a menace to bean and hay crops, which they raid at night. After all has been said, California must be seen to be appreciated, and if any of the home folks are coming out in 1915 they will find much to interest them and can go about from place to place in the middle of winter without the unpleasant experience of prying the carriage wheels out of the mud with a fence rail—first, because you could not find a rail, and second because the state is laying a cement road from San Diego at the southern end to San Francisco in central California, 600 miles, and the counties each are paving country roads to connect with the state highway, so we can soon travel all over the state without leaving the pavement.

If you have space for this in Green's Fruit Grower, I would be pleased to see it there and perhaps some of the home folks would be glad to read it.—Scott Wiles, Calif.

Testimonial

Geneva, Ga., Oct. 1, 1914.

Green's Fruit Grower:

On account of the European war money is becoming quite scarce in the Cotton Belt, but I don't see how I can get along without Green's Fruit Grower. It has so much good information and is so helpful. May it continue to prosper as it deserves to.—W. E. Edge.

Pride Goes Before a Fall

"Stop!"

The word was hissed by a goose just as a gobbler with all sails set strutted by. But the proud bird, intent on admiring his own plumage, ignored the command.

"Humph," sniffed the envious anserine. "He's all puffed up because he heard the farmer say Thanksgiving would be his day to enter society."

How the Public Profits By Telephone Improvements

Here is a big fact in the telephone progress of this country:



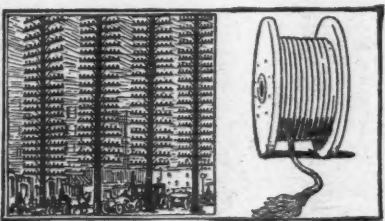
Original
Bell Telephone
1876

Standard
Bell Telephone
To-day



Early
Telephone
Exchange

Typical
Present-day
Exchange



If City Wires
Were Carried
Overhead

800
in Underground
Cable

Hand in hand with inventions and developments which have improved the service many fold have come operating economies that have greatly cut its cost.

To appreciate these betterments and their resulting economies, consider a few examples:

Your present telephone instrument had seventy-two ancestors; it is better and cheaper than any of them.

Time was when a switchboard required a room full of boys to handle the calls of a few hundred subscribers. Today, two or three girls will serve a greater number without confusion and very much more promptly.

A three-inch underground cable now carries as many as eight hundred wires. If strung in the old way, these would require four sets of poles, each with twenty cross arms—a congestion utterly prohibitive in city streets.

These are some of the familiar improvements. They have saved tens of millions of dollars.

But those which have had the most radical effect, resulting in the largest economies and putting the telephone within everyone's reach, are too technical to describe here. And their value can no more be estimated than can the value of the invention of the automobile.

This progress in economy, as well as in service, has given the United States the Bell System with about ten times as many telephones, proportionate to the population, as in all Europe.



AMERICAN TELEPHONE AND TELEGRAPH COMPANY
AND ASSOCIATED COMPANIES

One Policy One System Universal Service

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Curries off surplus water. Increases the value of your land. Acres of swampy land reclaimed and made fertile by using JACKSON'S DRAIN TILE. We are producers of Albany Blue Slip Clay, Hollow Brick and Blocks, Drain Tile, Fire Brick and Chimney Tops. Send for catalog and prices. John H. Jackson Tile Co., Inc., 90 Third Ave., Albany, N. Y.

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DAVENPORT, IOWA

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It runs on kerosene (coal oil), gasoline, fuel oil and alcohol without change in equipment—starts without cranking—runs in either direction—throttle governed—hopper and tank-cooled—speed controlled while running—no valves—no gears—no sprockets—only three moving parts—light weight—easily portable—great power—starts easily at any degree below zero—complete ready to run—children operate them—low factory price based on enormous output—30 day money-back trial—10 years limited guarantee. Size, 1-3 to 12 horsepower. Send a postal today for free catalog which tells how Sandow will be useful to you. No go-between. Pocket operator and salesman's commission by dealing direct with factory. (602)

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20 Canton Ave., Detroit, Mich.



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With or Without Lining
This glove has plenty of style, with fit and the soft smoothness of the oniseam.

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Describes many of the 500 styles—mittens too—for every occupation. All giving most value for least cost. Get Hansen's Gloves from your dealer. If he isn't supplied, write us. Anyway, write for book.

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Foot Scraper and Cleaner
Needed on every porch and outside door-step. Right now is the time to sell it—A winner. C. F. Draper, Mass., first order for 200. C. A. Johnson sold 40 in 1 1/2 days. W. W. Harpster, Pa., made \$27.45 in 4 evenings, spare time work. Write quick for terms of free sample. A postal will do.

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from a Bone Spavin, Ring Bone, Splint, Curb, Side Bone, or similar trouble and gets horse going sound. Does not blister or remove the hair and horse can be worked. Page 17 in pamphlet with each bottle tells how. \$2.00 a bottle delivered.

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ABSORBINE, JR., antiseptic liniment for mankind. Reduces Painful Swellings, Enlarged Glands, Goitre, Wens, Bruises, Varicose Veins, Varicosities, heals Old Sores, Allays Pain. Will tell you more if you write. \$1 and \$2 a bottle at dealers or delivered. Book "Evidence" free. Manufactured only by **H. F. YOUNG, P. D. F., 11 Temple St., Springfield, Mass.**

IF YOU FEED ALFALFA

Kaffir corn or sea vine without cutting or grinding it you are losing loads of money. The animals eat the tender alfalfa leaves but don't touch the stems. Isn't that so? Kaffir corn kernels are hard and if not ground are not digested. You know that too, don't you? Now why not investigate the machines that we are building for the purpose of preparing these foods so all will be eaten?

We also build Samson Wind Mills, Ensilage Cutters and a full line of Stover and Ideal Feed Mills. Send for catalogs. ■ ■ ■ ■ ■

STOVER MFG CO.
43 VINE ST.
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Farm Department

Autumn

I kind of like the weather when the frost is in the air;
An' the leaves are turnin' russet, red an' gold,
An' I kind of like to wander through the woods as
when a boy
An' forget I'm getting bald an' growing old.

An' I like to hear the twitter of the birds a-goin'
south,
An' the chatter of the squirrels among the trees,
An' to hear the deep bass honkin' of the geese a-flyin'
high.
An' the leaves a-rustlin' softly in the breeze.

I somehow like to wander, when the frost is in the air,
An' it sets my heart a-throbbin' like a boy's,
An' it sets my mind a-driftin' back along the line
of years,
To the days of youth an' love, with all their joys.
—Geo. A. Johnston in The Iowa Farmer.

When the frost is on the punkin' and the fodder's
in the shock,
And you hear the kyouek and the gobble of the strut-
tin' turkey-cock;
Oh, it's then's the times a feller is a-feelin' at his best,
With the risin' sun to greet him from a night of
peaceful rest,
As he leaves the house, bare-headed, and goes out
to feed the stock.
When the frost is on the punkin' and the fodder's
in the shock.

—James Whitcomb Riley.

Keeping Roadsides Beautiful

Nature is too lavish to withhold beauty from her own handiwork and she generously conceals the crudities in man's work also. Even when he distorts or obliterates her loveliness and in sheer weariness rests from his strenuous task, she silently,

they have acquired foothold serve to preserve the surface contour whether it be sloping, level or concave and help to prevent objectionable wild growth. Poison ivy and sumac, where they have established themselves along the roadside, should not be handled in summer, but in winter when their juices are dry, and then only with gloved hands. The fumes of the poison sumac when building are exceedingly dangerous.

If the neglected roadsides are attacked in the winter, cutting out the larger growth and burning the remaining young growth, grubbing out the roots of such growths as wild cherry, locust, elder, alder, etc., subsequent burning over the surface of the ground will leave it in pretty good shape for spring. Then, if the young non-poisonous vegetation is pastured off or mowed off, the desirable grasses will take possession. Mowing in July instead of late August or September will more effectually rid the roadside of most of the wild growth before it can reseed itself or thicken its stems.

This burning, mowing, pasturing method does away with nettles, burdock, weeds with winged or downy seeds, white daisies, brambles, etc. Wild carrot and Canada thistle propagate by creeping roots as well as by seed, and the conflict is shortened somewhat by getting out the roots at once. Embankments often re-



Pear trees by attractive road at Green's Fruit Farm.

patiently begins her work of re-adornment, says M. Roberts Conover, in The Farmer's Guide.

A treeless roadside, a naked fence, or a bare rocky bank may coincide with one ideal of neatness or utility, but they are unlovely. On the other hand, some of the finest bits of country beauty are directly contrary to the practice of the economical farmer; such as a boundary fence festooned with poison ivy; Canada thistles and wild carrots along the roadsides and in the corners of fences; a roadside border of goldenrod and wild asters and masses of wild sumac glowing red in the autumn sunlight.

One of the most glorious autumn color masses I ever saw was formed by a tall spruce hedge over which the gold and crimson foliage of Virginia creeper hung in gorgeous festoons and waved in delicate spirals from the tips of the branches. Yet the man who would keep his boundary fence a hedge in preservation—and comply with the law in certain sections—must keep these lavish natural encroachments down. Every man who has done it knows how tedious and disagreeable such neglected work becomes. To be easily done, it must be attended to when the growth is young and slender. Once the objectionable shrubby and weedy growths are recognized and subdued, the boundary may be kept beautiful by the use of other plants not so rampant.

Ferns and wild roses are not usually troublesome. Finer grasses when once

quire some good vine as a retainer. Hall's honeysuckle is useful for this, as it is hardy, almost evergreen and crowds out much undesirable growth. It is a great plant to spread, however, rooting from the branches, hence, would prove annoying adjoining pastures or untilled fields.

Where possible, hedges are more beautiful than fences. The wax myrtle or bayberry, privet, hawthorn, the spiny osage orange and the evergreens offer a variety which meet the requirements of many farmers. Trees are always beautiful and help to keep down certain wild growth, but one must consider the possible disadvantages to adjoining fields.

Dangers from Fire And How to Avoid Them

The loss occurring from fires in buildings in this country is appalling. It is far greater than that of other countries. The question arising is this, what can you and I do to prevent fires occurring on our property? Fires often result in greater losses in the country than in the city for the reason that there is no well-equipped fire department in the country. It is for this reason that fire insurance on farm buildings costs more than on city buildings. When a house catches fire in the city in most cases it can be extinguished by the fire departments but on the farm the buildings are almost certain to be destroyed, particularly if the fire occurs at night.

The causes of fires are numerous: in

the cities electric wiring is one of the common causes; defective flues on chimneys cause many fires in both city and country. Keeping hot ashes or any ashes in wooden boxes or barrels causes innumerable fires. On my place I will not allow any ashes, hot or cold, to be placed in wooden boxes, baskets or barrels. If cans or boxes are needed for ashes they should be of metal.

Greasy, oily or paint-covered rags, rags used with floor polish, oiled cloths, musty and damp papers or excelsior is liable to spontaneous combustion. These articles set themselves on fire. I recall an incident where a painter hung his paint or oil saturated clothing in a clothespress, causing a conflagration and endangering the building. It is not generally known that dampness in excelsior or paper will cause spontaneous combustion. Matches cause many fires. If matches are lost from pockets of smokers on floors they are often ignited or exploded by the scuffing of shoes over them, and thus set fire to straw or litter that may be on the floor; sometimes the heads of matches fly off when being struck and set fire to loose curtains or paper waste baskets or other inflammable articles. Safety matches, that is matches that can be ignited only by scratching them on the box in which they are packed, are the only safe kind.

Candles, lamps and matches caused 20 out of 89 fires in Rochester, N. Y., during the months of January and February, 1911. There is great danger in fires in handling gasoline, benzine and alcohol; the danger being in the volatile character of these goods. The gases escaping from them are as inflammable as gunpowder and more destructive.

Rubbish of all kinds is apt to invite fires, particularly dead leaves and dry grass that have accumulated around the house or on the corners by the porches. Shingled roofs are as inflammable as cotton and are the cause of many fires, since the sparks falling upon a dry shingled roof may burn the building.—C. A. Green.

A few years ago, says Freeman's Farmer, Hood River orchardists did not consider cover crops as being either practical or profitable. Now 80 per cent. of the orchards have cover crops, and growers specialize on red clover and alfalfa. There are about 13,500 acres set to fruit in the lower and upper valleys, the greater percentage in apples. It is estimated that there are upwards of 25 per cent. more trees bearing in the valley than last year.

THINK HARD

It Pays to Think About Food

The unthinking life some people lead often causes trouble and sickness, illustrated in the experience of a lady over in Wisconsin.

"About four years ago I suffered dreadfully from indigestion, always having eaten whatever I liked, not thinking of the digestible qualities. This indigestion caused palpitation of the heart so badly I could scarcely walk up a flight of stairs without stopping to regain breath and strength.

"I became alarmed and tried dieting, wore my clothes very loose, and used other remedies, but found no relief.

"Hearing of the virtues of Grape-Nuts and Postum, I commenced using them in place of my usual breakfast of coffee, cakes or hot biscuit, and in one week's time I was relieved of sour stomach and other ills attending indigestion. In a month's time my heart was performing its functions naturally and I could climb stairs and hills and walk long distances.

"I gained ten pounds in this short time, and my skin became clear and I completely regained my health and strength. I continue to use Grape-Nuts and Postum for I feel that I owe my good health entirely to their use.

"I like the delicious flavour of Grape-Nuts, and by making Postum according to directions it tastes similar to mild high grade coffee." Name given by Postum Co., Battle Creek, Mich.

The most perfect food in the world. Trial of Grape-Nuts and cream 10 days proves. "There's a Reason."

Look in pkgs. for the little book, "The Road to Wellville."

Ever read the above letter? A new one appears from time to time. They are genuine, true, and full of human interest.

Important Work Around the Young Orchard

Written for Green's Fruit Grower by M. COVERDELL

MAKE one more thorough search for borers, and thus give the tender trees a fair chance for life and vigorous growth next season.

Make sure that all label-wires are removed from the trees, else the action of the wind in shaking the trees and moving the labels will cause the wires to cut and seriously damage the branches to which they are fastened.

The season's growth of wood now is at an end, making this the ideal period of the entire year for pruning back the new growth, as nothing will be damaged nor retarded by it. Cut back about one-third of the present season's growth in apples; one-half in peach and plum; one-fourth in pear and cherry.

Wrap the trunks of young trees early for protection against the rabbits, and wrap them well up the entire trunk, to allow for deep snows, upon which the animals often run, thus reaching parts of the trees thought to be safe. Corn-stalks may be securely wrapped around the trunks of the orchard trees. Thick tar-paper also is good, but bars air and sunlight from the trunk. A thin veneer of wood is also good protection.

Ordinary screen-wire makes the best wrappers for the young trees, as it is open for the admission of the essential air and sunlight yet furnishes absolute protection from the rabbits. Then, they need not be removed at any time, which further affords protection from mice and rats. Another drawback to most other wrappers is, after being so closely wrapped for a long period of time, the young trees scald and blister when suddenly exposed to the direct rays of the sun; while, with the screen wrappings, no sudden change takes place.

Fertilizing the young orchard is another piece of important late fall work, and should not be neglected. Barnyard and poultry manure, mixed with well-rotted straw, should be placed around the base of the trees to a depth of from four to six inches. Not only will this prove highly beneficial in promoting rapid and vigorous development of the trees, but the protection thus afforded will prevent the roots from freezing so hard during the winter months. Care must be taken that the straw is not dry and of such a nature that mice will find in it a place to nest, where they would be a constant menace to the tender trees.

Unless great care was exercised at the time of setting out the trees, many of them will be leaning by this time. Even where the roots were placed in the ground straight, the trunk of the tree is crooked; so that straightening up will be necessary. Now, while the trunks of the trees are tender and pliable, is the only time in which this important work of straightening can be successfully done at small expense, and there are several good plans by which they may be straightened. Spade out a small "chip" of dirt from the side opposite from the direction in which the tree leans, before trying to straighten it, filling this space in with loose soil when through. Driving a small post on one side of the leaning tree and tying it over, is a good method of straightening. Another is to place a forked post against the leaning tree, forcing it gently back. In all cases, some soft cloth should be placed wherever there is danger of peeling the bark from the tree.

"OL' NUTMEG'S" SAYINGS

Written for Green's Fruit Grower by Joe Cone

A bed uv roses will eventually become hard.

Some people git the hottest tryin' to keep cool.

Dont cry over spilled milk; it might hev been cream!

Ez one uv the summer torments the muskeeter fills the bill.

A smile is the searchlight that shows the road to contentment.

Dont git riled; muddy water ain't even fit to give to the hens.

Many people start things who never stay aroun' to see the finish.

Some fellers kin blow their own horns successfully without makin' any noise.

Occasionally you will find that a woman's crownin' glory belongs to some other woman.

It's all right to stick to Natur', but don't let too much uv it stick to you.

There are two kinds of windfalls, but we should never waste time waitin' fur either kind.

Ef you find you are barkin' up the wrong tree, the next best thing is to try a new bark.

Man is known by the compenry he keeps, an' sometimes by the compenry he throws away.

Mebbie the man who hessertates is lost, but the stuturer usually finds the high road to success.

It's a good thing to give advice, but you will find that somethin' else is allus more acceptable.

Jest becuz you hev got somethin' laid up for a rainy day don't be eternally prayin' for rain.

Sometimes the sweet voice over the tellerphone, an' the face that goes with it, hev no connection.

It's allus a good idee to aim high, mebbie, but they's sech a thing ez overshutin' the mark.

By keepin' your nose out uv other people's bizniz your hull face is apt to take on a better expression.

The ol' sayin' about "keepin' in the middle uv the road" seems to hev been autoed out into the ditch.

Some folks pride themselves on never answerin' back, when o'untimes it would be much better ef they did.

The feller who says he kin see through ev'rybody is apt to be purty thin-skinned himself.

You can't expect a skunk to do the square thing—he is apt to turn on his best friend.

It is no more foolish for a dog to bark at the moon than for a befuddled man to mistake it for an early sunrise.

Ef you can't say anything good about your neighbor then you had better talk in a language that nobuddy kin understand' but yourself, an' even you don't wanten be dead sure uv it.

Fruits Seen at Rochester, N. Y., Fair

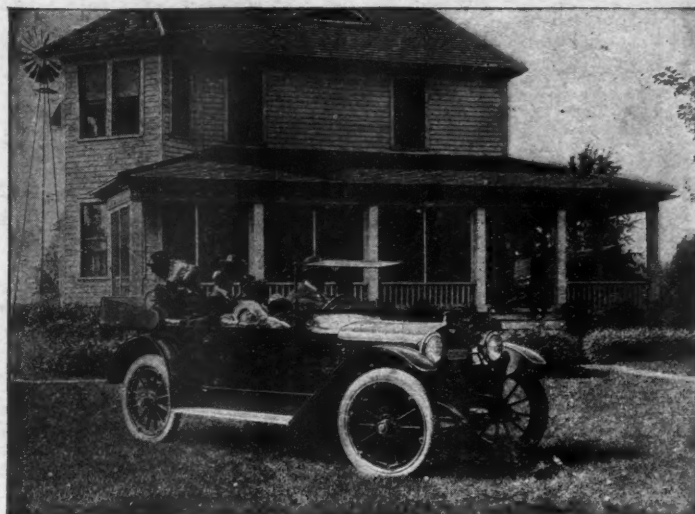
At the recent Rochester, N. Y., Exposition I was deeply interested in the display of fruits and vegetables. I found the Bartlett pear constantly in evidence on almost every table and by almost every exhibitor. The color and shape of this pear are ideal. No more beautiful color could be suggested. The bright light yellow cast in contrast with the dark dots on the skin and the peculiar shape of the stem made the pear recognizable at a long distance. Surely one cannot see the Bartlett pear without a temptation to take it in the hand and eat it.

The Elberta peach was more frequently seen than any other variety. Champion was shown. It is of good size, white fleshed, red cheeked, of delicious quality. Mountain Rose as shown is a large white peach with red blush and seems almost identical with Carman, which was exhibited by its side. So far as looks are concerned and season of ripening, I could see scarcely any difference between the Carman and the Mountain Rose.

Much was made in the display of apples of Alexander, McMahon and others of that class, all large and showy apples, but of inferior quality. There may be some excuse for growing these apples at the north where only hardy apples can be secured, but there is no excuse for growing them in western New York where we can grow apples that are far more attractive in quality, such as Spy, Hubbardston, Banana, McIntosh Red, Fameuse and Blenheim Orange.

Among grapes the little Delaware was shown in beautiful clusters. This is certainly a delightful grape, one of the old-time favorites that has never been superseded. It is among the earliest to ripen and one of the best in quality. If it has a defect it is its slow growth. Concord, Worden, Niagara, Moore's Diamond and the other favorites were shown in profusion.

Plums were in the minority as the crop of plums in this section of the state is very light this season.—C. A. Green.



Car of the American Farmer

The first of four good reasons why the new Hupmobile is more than ever the car of the American Farmer is its generous Five-Passenger room.

Hup has always been comfortable, but the new car is even more comfortable, with Room for Five; deep, soft cushions and better springs.

Second is the well-known Hup economy, coupled with the equally well-known reliability—things that are mighty important to any farmer.

Third is the simple, strong construction.

Any farmer, or any farmer's lad, can understand it and care for it with the least

amount of time and effort.

Fourth is the way it holds the road. It is light enough to be economical; yet given enough weight, and a perfect balance, so that it sticks to the road at any speed.

In equipment, the new Hup offers all that any reasonable man can require.

See the new car, by all means.

The nearest dealer will be glad to demonstrate it on your neighborhood roads.



\$1200 Complete

Five Passenger Touring Car or Roadster.

Price, F. O. B. Detroit.

Model 32, with all regular equipment,

electric starter and lights, oversize tires

and demountable rims, \$1050 F. O. B.

Detroit. With regular equipment only,

\$950 F. O. B. Detroit.

Write the factory for illustrated, complete literature.

Hupp Motor Car Company, 1332 Milwaukee Ave., Detroit, Mich.

International Harvester Manure Spreaders



WHY are International Harvester manure spreaders so popular?

Because:

An I H C spreader is low enough for easy loading, yet it has plenty of clearance underneath. The rear axle is well under the load. Rear wheels have wide rims and Z-shaped lugs, insuring good traction under all conditions. Frame, wheels, and all driving parts are of steel. Apron tension is adjusted by a simple device. Winding of the beater is prevented by large diameter, and beater teeth are strong, square and chisel-pointed.

International manure spreaders are built in several styles and sizes, low or high, endless or return apron, for small farms and large. Repairs, when needed, may always be had promptly of the local dealer.

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Small Fruits



Johnny picking grapes. Photograph by Mrs. William Durrant. We are told by a grape grower that in his vineyard a bushel of grapes can be picked without the picker scarcely moving from one position.

Lost: A Home

Written for Green's Fruit Grower by

Frank M. Beverly

Once I lived on a little farm
Far back among the hills,
Where I could hear the songs of birds,
And list to gurgling rills.

'Twas there I rose to greet the sun,
Whose early peep at morn
Reminded me on summer days
'Twas time to hoe the corn.

The breezy freshness from the woods
Was wafted 'cross the way;
It sweetly cooled my heated brow
On many a sultry day.

The squirrels would chatter from the trees,
The jays would loudly call
Unto the casual passers-by
From out the tree-tops tall.

But now, alas my eyes grow dim
For to the town I've strayed,
And I shall never more enjoy
That little home I made.

Care of Grapevines in Winter

Editor of Green's Fruit Grower:—
Grapevines need some protection during winter in order to produce the best results. When the vines have shed their leaves and the wood has hardened, the pruning knife should be used. Before the coming of cold weather they should be loosened from the trellis and let rest on the ground. They should be covered with leaves, straw, or some other light covering. It is the wood of the past season's growth that needs protection. This wood contains the embryo fruit for the crop of next season.—Frank Monroe Beverly, Va.

Note: While at Rochester, N. Y., it is not necessary to protect hardy grapevines, it will often be found helpful.

Let us not be found, when our Master calls us, ripping the lace off our waistcoats, but the spirit of contention from our souls and tongues.—Dr. Johnson.

Cranberry Growing in Massachusetts

Written for Green's Fruit Grower by

Stephen S. Gammon.

THE cranberry growers in Plymouth county, Mass., began harvesting berries the last of August, while Barnstable county berry-picking is three or four weeks later. New Jersey and Wisconsin are usually supplying the market with their early berries just as the Cape Cod lates are ready for market.

Picking cranberries awakens an innumerable company of people in many States, cities and towns. There are many large families (mostly French and Portuguese) who have a vacation from their employment as mill workers just in time to pick cranberries, and a very large number of them find their way to the town of Carver, as cranberry bogs can be found at every point of the compass, even at the center of the town. While there are many beautiful and costly homes in Carver, there are also many clumps of bog cottages, where the pickers live a few weeks if they obey the boss. Most of the new bogs two or three years old should be picked by hand so as not to injure the young vines. The women and children can do this kind of work quite satisfactorily, if they will, but very few people like to do the right thing, for they crawl over many berries—which spoils them—before they can be induced to pick all (pick clean, we call it), and consequently many of the pickers are discharged every day.

Each picker is supposed to have a tin measure holding six quarts. The boss or tally keeper takes the pickers' names and gives each one a number. As soon as the measure is filled the picker calls the number which has been given him or her. They empty the berries into a box or barrel and proceed to fill another

measure, then another, and so on during the day.

Some bogs are picked by men using small hand machines which hold from one to two quarts. Most of the men pickers insist on using these small machines, called snap machines. Many men using this small hand machine have been known to earn ten dollars a day each, but such rapid work injures the vines and also bruises the berries, which makes bad work and loss to the owner.

There is still another way of harvesting berries. It is with the large scoop which holds ten or twelve quarts of berries. These scoops are operated by men who are paid by the hour, the average price being thirty-five cents per hour, but not all cranberry vines are adapted to this method of being stripped of their fruits. The vines have to be regularly pruned and raked yearly to be ready for the large scoop. In all of the present methods of harvesting cranberries the pickers have to get down on their knees and crawl, and generally the smartest ones get the most money. There is a chance and a great need for an improved cranberry picking machine to be operated by power.

As soon as there are several barrels of berries harvested the teamer is called, the berries carted to the packing house, sometimes they are screened and shipped immediately, sometimes they are stored for a while, according to the condition of the market.

Note: According to the Department of Agriculture, which has been making inquiries among 300 cranberry growers on Cape Cod as to the condition of their crops, replies from 13 of the largest and most widely experienced cranberry growers were tabulated separately. The average of their estimates is that the 1914 crop will be 12 per cent. larger than last year's. The average of the other replies is that it will be 8 per cent. larger. The Cape Cod Cranberry Growers' Association estimate it will be 16 per cent. larger, which would indicate 380,222 barrels.

According to Secretary A. J. Rider of the New Jersey Cranberry Association, the crop of the cranberry section in New Jersey and Long Island will be close to 250,000 bushels, a considerably larger crop than that of last year.

Figs in the New England States

Written for Green's Fruit Grower by
Frances B. Phelps

Some few people in New England have grown figs in hot houses as a curiosity, but it has been proved that they may be raised as a profitable crop. In the South, two and sometimes three crops are gathered. This cannot be done in New England, as cold weather comes before the second crop is ripe. Some people, however, think the trees bear a heavier first crop on account of their enforced rest during the winter.

At Cedar Hill, the estate of Miss Cornelia Warren, at Waltham, Mass., fig growing was tried as an experiment. It has been so successful and has proved to be such a sure and safe crop that a good-sized house is now being constructed, so that they may be raised in large quantities. This house is so built that the trees can be left in it the year round. It can be entirely open in summer. The trees need no heat, simply to be protected from frost.

Mr. Job Barker, whose farm is near Newport, Rhode Island, is another successful grower of figs. Mr. Barker formerly sent his fruit to the New York market, but since Newport people have discovered his place, he has no difficulty in disposing of his entire crop on the premises. Many people are extremely fond of the fresh fruit, and it is quite a fad to go out to the farm and get the fruit right from the tree. Instead of housing his trees, Mr. Barker has found that it is a very satisfactory method to pull them up, as cold weather approaches, and stand them in the cellar, where they are safe from frost, and will remain in a dormant state throughout the winter. As soon as the danger of freezing is past, the trees are again set in the ground. The trees are easy of propagation, and the roots can be subdivided when more trees are needed. It would seem that figs might be raised in almost any part of the country, although to most farmers it is quite a new idea.

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Please mention Green's Fruit Grower.

Some Tales That Dead Leaves Tell

Written for Green's Fruit Grower by F. H. SWEET

SIT down under the trees when the
wind is blowing, and examine
the leaves that fall into your
lap. Or gather a basket in No-
vember from the wind-rows that
accumulate along the fence, and look
them over with care when you get home.
Very few are perfect. On their scratched
and torn surface we read the lashings
they have received by the wind through
the long summer. The natural ripening
of the leaf, the withdrawal of its pulp
into the twig, leaves the blades little else
but shells, sere and empty. But among
the battered remains are plain records
that insects have written upon them.
These are worth studying, before snow
covers up the fallen leaves. There is a
good reason for going out among the
trees, even in late autumn. November
has the secrets dead leaves hold.

The foliage of trees serve insects in
three ways: as food, as shelter, and as
both combined. Examples of each are
plentiful. Caterpillars begin by eating
the pulp of leaves and leaving the rough
veins. As they get big they do not spare
the ribs, but eat all they come to. Small
species are always daintier, because their
jaws are not equal to the chewing of
tough fibers. We can identify the insect-
eaten leaves, with their margins irregu-
larly cut, and the ribs left with no web to
support. They do not look like leaves
torn by wind.

Sucking insects damage leaves by
inserting their beaks into the soft pulp
and pumping out the soft substance under
the skin. No leaf can stand this drain
of its living tissues. If a leaf is dead and
curled, or if it shows empty patches,
with the veins a skeleton covered with
thin, dead skin, the sucking insects may
be blamed. They are usually small, but
they work in multitudes, shoulder to
shoulder. Much of the damage in or-
chards is done by plant lice, which ruin
a crop of fruit if they disable the leaves
of the trees. For the tree depends on
its leaves to ripen the fruit.

When eating days are over, a caterpillar
looks about for shelter in the sleep that
is about to fall upon him. Many dead
leaves are used as a foundation of a co-
coon. The caterpillar wraps the leaf
about its body like a cloak, winds silk
thread that holds the leaf close while the
squirmy body turns over and over, making
the lining of silk thicker and
thicker as a protection. Some of these
cocoon fall and lie undiscovered among
the other dead leaves. Others are fast-
ened to the twigs so that they never fall.
The insect does this fastening before the
cocoon is spun, and it is surprising to
find how well concealed the cocoon, left
hanging in plain sight on the tree, really
is. We have eyes, and we see in a wild
cherry tree a half dozen leaves curled and
dangling from the twigs. The Prometheus
moths' caterpillars are artists to fool so
many passersby so completely all winter.
Inside each leaf is the sleeping pupa.
The moth will emerge when spring comes,
leaving the gray silk case that so long
held it out of harm's way.

EXAMINE THE DEAD LEAF

The dead leaf the tree clings to is al-
ways worth examining. There is a good
reason for its not falling, and a caterpillar
is usually to blame for this exception.

It is not unusual to find a globular
cluster of spiders' eggs within the folded
edges of a leaf that stays on the tree.
The giant silkworm, Cecropia, works a
leaf or two into the outer cover of the
three-inch cocoon it fastens, lengthwise,
close to a twig of maple, box elder,
or apple trees. These are easily found after
the leaves have fallen, if one is looking
for them. They are usually gray or
brown; I once got forty from a single
maple tree.

The alanthus tree is infested by big
caterpillars which are satisfied with a
single leaflet of the fern-like leaf when
spinning time comes. Some of the co-
coons are fastened merely to the leaf
stalk. They drop with the falling leaf
to the ground. Others are fastened to
the twig, and these winter on the bare
tree, and easily in sight. If the alanthus
grows in your town, look now for the
cocoon of the Philosamia. Keep them
over winter and see for yourself in spring
what a beautiful moth is the winged adult
of the alanthus worm.

The oval cocoon of the lovely pale
green Luna moth lies among the dead
leaves under the common forest trees.
The caterpillar feeds on many different
kinds. It is worth a long search to find
one.

The leaf cover of a cocoon serves a
double purpose; it adds to the thickness
of the cover that guards against cold
and the attacks of enemies, and it conceals
from detection, because it makes the
cocoon look like a dead leaf.

BLACK LOCUST LEAVES

Under black locust trees are found
leaves with half a dozen leaflets drawn
together, forming a little room. This is
vacant; the tenant was the larva of the
silver-spotted skipper, a slim-necked
caterpillar, very shy when disturbed in
summer, but long since changed to a
winged brown insect like a butterfly in
many particulars.

Food and shelter gall insects find in
the globular oak-apples as they grow in
summer. The insects are now asleep in
the inner cells. Curled leaves of our
dooryard elms and orchard trees are
deserted homes of colonies of plant lice,
which draw sustenance by probing the
tender walls of leaf substance. Cock's-
comb galls on elms are homes of one kind
of plant louse or aphid. Swellings on the
stems and mid-ribs of cottonwood leaves
housed and fed aphids of two other spe-
cies. Each home has a doorway through
which the insects escaped.

The white-blotch oak leaf miner lives
its life between the upper and lower walls
of the leaf. It eats the pulp as it grows,
making clear, dead patches, where the
under skin is drawn, throwing the upper
side into a fold. Take some of these
leaves indoors, put them in a glass jar,
screened with cheese-cloth at the top.
Cut away all but the mines, so you can
see the little silvery moths when they
emerge. Occasionally through the winter
you may lift the skin of the leaf to see if
the larva has changed yet to a pupa.
The cocoon is of a few white silk threads.
Disturbed by a touch from the point of
your pencil, the pupa will bend its abdo-
men with a quick, snapping motion.

This is dealing with small things, but
there is no reason why any one should
deny himself the pleasure of knowing this
little leaf miner. The moth is scarcely
one-third of an inch across, with a bar
of brown across its silvery, fringed wings.

Serpentine miners are familiar to us in
leaves of the columbine. Other leaves
have winding passages between their
walls, from the point where an egg was
laid, along a gradually winding course.
As the larva fed, it changed its course at
will, and finally rested as a pupa in the
large end of its tunnel, and came out a
winged moth, when the pupa sleep ended.
How many of these serpentine mines can
you find? How many have the insects
still within? Is it a pupa? Find out
what it changes into, and when the change
takes place. This means bringing in and
watching a few leaves containing miners.
Infinitely smaller than the Luna moths,
these miners are as beautiful and live
quite as interesting lives. It is best to
watch a series of big and little kinds
through the two last stages of their life
histories. Watch the changes and record
them accurately. What no man ever saw
before may be revealed to you.

Important Information Wanted About Fruit Planting

A subscriber of Green's Fruit Grower
asks the editor to name five best varieties
of apples and four best varieties of peach
for his location in Tioga or Broome
county, N. Y. He intends to plant about
100 acres.

I do not feel competent to name posi-
tively the best five varieties of apples
or the best four varieties of peaches.
To do as requested would be something
like asking me to name five of the most
worthy citizens of my city. There are
many notable men living here, but who
could undertake to name five of the best?
There are thousands of varieties of ap-
ples and nearly as many of peaches.
Who is wise enough to name the best of
these varieties? No single variety of any
fruit possesses all of the traits and pecu-
liarities desired. Varieties of fruits are
something like character in men. All

men have their defects and most of them
have their strong points.

Desiring to aid this friend, I will sug-
gest those varieties that seem to be the
most desirable. Here is a list of the ap-
ples recommended as valuable varieties
for this state: Baldwin, R. I. Greening,
King, Spy, McIntosh or Wealthy.

Here is a list of four valuable peaches:
Carman, Niagara, Elberta, Fitzgerald or
Crawford's Late.

I am not sure that Tioga and Broome
counties are particularly noted as apple
growing sections. I hear of some suc-
cessful orchards in those sections, par-
ticularly along the Susquehanna river
and some ten miles back from the river.
A friend suggests that the numerous vil-
lages along the Susquehanna river fur-
nish a splendid local market for fruits,
particularly small fruits. I would not
buy a farm on which to plant apples and
peaches unless I found on investigation
that the locality was favorable for the
growing of such fruit.

"Buy a Barrel of Apples."

Those who have launched the discussion
that is expected to crystallize into a move-
ment that will send much money upstate,
declare that there is more logic to the
appeal "buy a barrel of apples" than to
the slogan "buy a bale of cotton," because
apples can be eaten, and cotton is neither
food nor good fuel, while a barrel of apples,
landed at the door of the buyer, cost but a
small fraction of the price of a bale of the
South's chief staple.

It is calculated that such a cry would
appeal with special force to those who,
bred on farms and in the country towns,
have a fondness for the fruit and pleasant
recollections of the days when nobody
would dream of buying apples by the
dozen, and there usually was a barrel or
more in cellar or pantry, where all hands
might help themselves. That the cry
would appeal to the masses interested just
now in reducing the high cost of living is
another factor that has been considered.

The "Meat" of Corn

—the sweet centers of choice
Indian corn; cooked, seasoned
just right, rolled thin as paper
and toasted until they become
golden brown flakes—crisp
and delicious!

That's why

Post Toasties

are better than ordinary "corn
flakes."

Toasties are packed in an
inner container inside the tight-
sealed, familiar, yellow carton
—keeps the food fresh and
crisp for your appetite—

Superior Corn Flakes

—sold by Grocers.



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FREE Send 10c and your tobacco dealer's name, and we'll mail you prepaid, anywhere in U. S., a full-size 10c cut of "PIPER" in a handsome leather pouch FREE. The tobacco, pouch and mailing expenses cost us 20c, and we gladly spend the money to get you to try "PIPER."

Sold by dealers everywhere, in all size cuts from 5c up.

THE AMERICAN TOBACCO CO., 111 Fifth Ave., New York City, Room 1159

Apple Buyers and Sellers Read This Offer of Help

Those Having Apples for Sale Should Notify Green's Fruit Grower and Possibly Secure Assistance

As the editor of Green's Fruit Grower desires to be helpful to his readers in every way possible, he will ask those subscribers who have carefully graded winter apples for sale in boxes or barrels to write to Green's Fruit Grower stating what varieties they have and how many barrels or boxes of each, carefully graded and of good quality.

This request is made with the hope that Green's Fruit Grower may be able to advise where these apples can be sold or may be able to send a purchaser for the apples. In every instance, state the price you will accept for your apples.

At Green's Fruit Farm we have advertised in Green's Fruit Grower that we have apples for sale and have made many small sales of boxes or barrels and have had inquiries for large quantities, one inquiry asking for 20 or 30 carloads of apples.

Our advice is that our subscribers shall not hold their apples for high prices this year. At the present moment \$1.50 per barrel is the local carload price for carefully graded apples, and by this I do not mean fancy apples, but such as in New York State would be graded as New York State Standard A Grade. This will leave at least 50 per cent. clear profit per barrel.

Those who write us they have apples for sale and ask us to assist them should notify us at once if later on they find a purchaser and are no longer offering their crop for sale.

We urge all our readers to grade apples more carefully this season than usual owing to the depressed prices on account of the war in Europe. Those who mix inferior apples with first class apples in barreling will make a serious mistake and may find their fruit unmarketed. A dozen inferior apples mixed with good apples in a barrel will greatly lessen the price of the entire barrel.

Where there is no sale for second class apples or windfalls, they can be profitably stored in barrels with straw or hay thrown over them to protect from frost or in cellars.

If you get no response from your letter to us as above, it will be evidence that we cannot at present assist you.

Those who desire to buy apples, should write us full particulars, what price they will pay, etc. No charge will be made for this service either to buyer or seller.

PROFIT IN APPLES.

Mr. Bernard Kelly, for thirty years a mail carrier at Rochester, N. Y., who has long delivered the mail of Green's Fruit Grower, says he paid five cents a bushel for getting his apples picked. He has carefully sorted them, securing 1,500 barrels of first class apples, which he has sold at \$1.65 per barrel. He figures that he has made a profit of 80 cents per barrel on these apples. The total net profit from his orchard this year is \$1,200 according to his figures.

LATER NEWS FAVORABLE TO THE APPLE MARKET.

The superintendent of Green's Fruit Farm tells me that he is having many applications for apples coming in from different parts of the country. He says he will have no difficulty in selling in small lots all the apples we have this year at from \$2.00 to \$3.00 per barrel. Since receiving the letter asking for prices on 40 carloads, he has had a letter asking price for eight carloads of apples.

Recently our superintendent, Mr. Burson, met a large and successful grower of apples in Monroe county who had just sold his crop of 3,000 barrels of Twenty Ounce apples at a very satisfactory price. This grower also received an inquiry for 80 carloads of Twenty Ounce apples, which he had a market for at \$4.50 per barrel.

It looked as though despondency had taken possession of apple growers early this season on account of the war in Europe, but that now, October 16th, the outlook is much brighter. When we consider that only seven per cent. of our fruit crop in an average year goes to Europe, according to the United States census, we should not allow European war to influence us seriously. The Country Gentleman reports that only four per cent. of

our apples goes to Europe each average year.

While we still continue to urge our subscribers not to expect high prices for apples this year, we advise them not to sell them at a price that yields no profit. Apples at \$1.50 or \$2.00 per barrel yield a good handsome profit.

"Stay on the Farm" Rather than "Back to the Farm"

Editor of Green's Fruit Grower:—Mr. Allen Pressley Wilson's article in your August issue entitled "Stay on the Farm" is worthy of notice, inasmuch as it emphasizes the point that it should be the aim of social workers to keep the boys that are reared on the farm in the country. But any movement which has for its aim the sending of city-bred people back to the farm is not well directed.

I have traveled over Michigan considerably and have had ample opportunity to view some of the results of the "Back to the Farm" movement which has been inaugurated in many cities. Mr. Wilson of Baltimore has not studied this question in its every aspect for he says: "It is not doubted that any influence that can be brought to bear on those now in the towns and cities to return to the farm is energy well expended." Contrary to this statement, any energy which is expended in getting city people to return to the farm is lost. It never should be done. I can take Mr. Wilson to 5,000 farms in Michigan that have been taken up by these "back to the landers." The houses are now boarded up or buried down, the farm is abandoned and the people have gone back to the city a little richer in experience but poorer in capital. I have known of several instances where these people have literally sunk the earnings of years. This disposition of capital cannot help but have an economic effect upon the country and city as well. Other states have had the same experience as has Michigan.

It is easy for the glib land agent of Chicago or New York city, or even nearer home, to have pictures of an adjoining farm taken, and tell how much a certain farm will produce, but it is a somewhat different proposition to get out onto the farm and produce these crops. Many city people have the idea that all the farmer has to do is to sit under a shade tree with a cigarette in his mouth and have his pockets filled with coin. Indeed, far from the truth. Farming is a highly competitive business—much more so than it was 20 or 30 years ago—and the up-to-date farmer chops but few weeds with the "well-directed aim of the hoe," neither does he till his corn. By the time the city man has the needed experience in order to thrive on the farm, he is ready to move back to the city where the daily hours are ten only and the pay is sure as long as one can work.

Any movement which has for its aim the keeping of country boys and girls on the farm is worthy of the support of both city and country alike. If half the energy were expended in trying to keep the farm boys and girls at home that has been spent in the "Back to the Land" movement, much of our present social evil would have been eliminated. We do not want city people to come back to the farm—we want the country people to stay there. The country boy knows the conditions under which his father labors, is acquainted with the operation of farm machinery and knows considerable of the habits of plant and animal growth. These things have changed, are better understood, and farm ideas are so much different than they were even ten years ago, that the one-time farmer's son has much to forget and learn over again before he becomes a successful farmer.

I have read many discussions about keeping the boy on the farm, but I believe Dean Shaw of the Michigan Agricultural College hit the nail on the head when he said in speaking to a class: "Boys and girls leave the farm for two reasons: because they are not permitted to shoulder responsibility and because they have no financial interest in the business."—I. J. Mathews, Mich.

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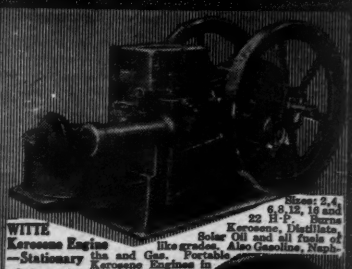
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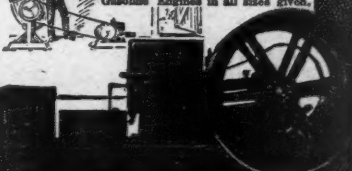
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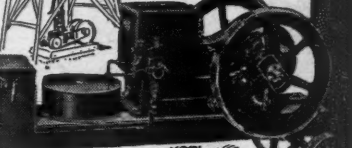
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Aunt Hannah's Replies

If I were King of France,
Or, better, Pope of Rome,
I'd have no fighting men abroad,
No weeping maids at home;
All the world should be at peace—
And if kings must show their might,
Why, let those who make the quarrels
Be the only ones to fight.
—Old French Song.

Aunt Hannah's Reply to Lonesome Girl

A girl signing herself Lonesome, who is 21 years old, has a fairly good education as her letter indicates, has been receiving the attention of a young man off and on for three years. He is a few years older, is good company and seems bent on having a good time, taking out one girl one day and another some other day, and so on to the end of a long list, without paying particular attention to any one of his girl acquaintances.

This young man is popular in the neighborhood, and so intelligent and interesting that the girls all like him, therefore he is never at a loss for company of the opposite sex. The Lonesome girl has had other beaux, but she thinks more of this man than any of the others. She asks for advice as to what she can do or what she should expect.

Aunt Hannah's Reply: I will guarantee

to say that there are 500,000 girls in this country situated just as is this lonesome girl. I mean by this that the condition of affairs which she enumerates are met by the average girl of marriageable age throughout the country. These girls, intelligent and attractive, capable of making good wives and of making some good man happy, and making his home attractive, find difficulty in getting just the right kind of a husband.

Certainly they must expect to have a hard time in getting just the right kind of a man. Even the men, who have every advantage, and are supposed to have the privilege of selection and of proposing, have great difficulty in finding the right kind of a girl according to their peculiar ideas.

I assume that an average, attractive and interesting young man of fairly good looks waits upon, escorts or keeps company with thirty girls before he selects one to be his wife. This young man has a right to be particular. The probabilities are that he will never have another opportunity to propose marriage. He wants to get the best, if possible, the best looking one, the best educated, the most agreeable, the most accomplished and possibly the one belonging to the best family, or, which is scarcely admissible, one that belongs to the wealthiest family, other things being equal.

Here is the point I am getting at, which is that marriage being the most important thing in life must not be expected to be secured in a moment by a leap, a plunge,

the judge and jury in the following words addressed to his first wife whom he had abandoned:

"Have I not paid you liberally for your support? Why should you disturb me after my efforts to make you comfortable?"

I am glad to be able to state that the jury and others present sympathized with the abandoned wife and not with the unscrupulous and unfaithful husband. At this period of civilization no husband can point to any sum of money which he has paid or will pay to the wife of his youth in compensation for his abandonment without condemnation. Human affection, human love cannot be mentioned in terms of dollars and cents. Wounds of the heart cannot be healed with money or bonds or costly real estate. No man of honor can appear before any tribunal and attempt to defend himself from the crime of abandoning his first love owing to the fact that he has from his great wealth bestowed a small or large portion upon the woman he has pledged to love, honor and cherish so long as life shall continue.

Marriage is a serious question. It should not be entered into except with thoughtful consideration. When a marriage contract has been consummated it should be carried out, except under unusual circumstances which seldom occur. I have known many cases of the separation of man and wife, and I have not known one instance in which the after-life of either husband or wife has been a happy or suc-

ANSW

Green's your "F years, an the cake I cut out speaks of being suc berry an such a lo that m From the had only 1/4 inch, withered. Three or Corsican, Walker, R

Reply: most pr Green's I is very p

Editor plum and fruit and about fou many lea plum tre peach tre but the l weeks I

THE HOUSEWIFE
POULTRY SUCCESS
GREEN'S FRUIT GROWER
All Three
A Whole Year For One Dollar

Green's Fruit Grower supplies every month authoritative information on the lines of work that will during that month engage the attention of the men in the orchard. One month it is spraying, another pruning, another picking, another marketing, and so on until the entire subject has been treated. For thirty-five years Chas. A. Green, the Editor, has maintained a close personal touch with fruit growing and with the fruit growers of the United States and through the many departments of the paper has shown them the way to success with fruit. Technical enough for the commercial grower yet simple enough for the beginner, and always reliable. Green's Fruit Grower is worthy of a place in the home of every one interested in fruit growing. Regular price 50c per year.

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List of Chapters

- CHAPTER
1-3 Laying out the grounds.
4 Vines for ornament and utility.
5 Shrubs.
6 The Hardy garden.
7 General suggestions.
Beautifying your home benefits the community.
Fruit Garden for city or village lots.
List of Desirable Shrubs and Vines.

Green's Fruit Grower Co., Rochester, N. Y.



Scene in a Niagara cherry orchard during the picking season. While cherries for immediate consumption or canning may be picked without stems nearly all cherries are considered unmarketable unless the stems are left on them. I have not heard of eastern cherry pickers using shears for clipping the stems instead of pulling the stems off with the fingers as is practiced on the Pacific Coast. One drawback to cherry culture is the large number of pickers necessary to gather the fruit. The cherry tree cannot be stripped of its fruit so easily as the apple tree or the peach tree. This is probably the reason why cherry orchards have not been more frequently planted in the past. It is only during recent years that large cherry orchards have been introduced into many sections of this continent. The cherry is a delicious and delightful fruit. The cherry tree is an ornamental tree at all seasons whether in blossom or loaded with its beautiful clusters of enticing fruit.

or a grab. I advise girls to be patient and be willing to wait, and I advise a young man to do the same thing. The old saying is that "Everything comes to him who waits." This is often not true.

Of all the sad things the saddest is to see a young girl pining away her life for love of a man who simply cares for her as a friend or casual acquaintance. I have known of many such girls who die of broken hearts, assuming that the interesting young men who escorted them to entertainments, and who waited upon them regularly for a year or more, intended marriage, whereas he was simply looking for a wife, and perhaps hoping that he would fall in love with one of these disconsolate girls.

This is a hard world. This letter tells of hardship. There are many things that occur daily that are cruel and many that are unjust. When we read in history and learn of the horrible events, of all the wars and butcheries, all the frauds and misrepresentations, all the lying and deception that barbarians could think of or suggest, a thoughtful mind might be forgiven for assuming for the moment that there was no overruling power, no provident God watching over the destinies of mankind—but there is a God, doing much for us daily.

Will Money Heal a Broken Heart?

A prominent French politician, who had abandoned the wife of his youth for another woman, defended himself before

successful one. Those who play with divorce and separation are playing with fire that burns both the innocent and the guilty.
—Aunt Hannah.

A Good Hospital

A young man asks my advice as to which hospital he shall enter for a surgical operation. For four years he has suffered with a stomach trouble, has consulted about a dozen physicians, some of them specialists, and is now advised to have a surgical operation in a nearby city. This young man has not much money, yet he feels that it would be unsafe to trust his life in the hands of any but an expert.

Reply: I advise you to correspond with the Johns Hopkins hospital at Baltimore, Md., which is considered unsurpassed with experts and facilities. Explain fully your financial condition. Johns Hopkins is not run for money-making. I am confident that those who have but little money will be treated with great consideration. They have at this hospital experts in every line of surgical work. They have two physicians who attend exclusively to stomach troubles where a surgical operation is necessary.

The Doctors Mayo of Rochester, Minn., are noted the world over and are wonderful surgeons. They do not, I think, make a specialty of surgical operations upon the stomach, as does Johns Hopkins hospital.

The above was brave enough line-up is shown attention to the excuse for not shown in this

benefit from all off and I am very and will you be done? chicken ya can be a N. Y.

Reply: the trouble ing them stances. indefinite s may have b have done giving "me gards of vious spray have been Borers can —H. E. Var

Peach Mr. C. A. peach orch The locusts had the pi different tin Will put in prune now? nelly, West

Reply: I trees stung ently from I would out

Answers to Inquiries

Sweetheart Strawberry

Green's Fruit Grower:—I have taken your "Fruit Grower" for a number of years, and as a fruit magazine it "takes the cake." I send you a clipping that I cut out of the last number in which it speaks of the Sweetheart strawberry as being such a heavy cropper. Is it a large berry and fine quality, etc.? We had such a long spell of hot, dry weather here that most everybody's berries dried up. From the 25th of March for 85 days, we had only 2 slight showers not to exceed $\frac{1}{4}$ inch, and of course our gardens all withered. I have set out more berries. Three or four years ago I set out some Corsican, and they did very well. H. A. Walker, Fla.

Reply: Sweetheart strawberry is the most profitable strawberry grown at Green's Fruit Farm. As grown there it is very productive of large fruit.

Plum and Peach

Editor of Green's Fruit Grower:—My plum and peach trees were well laden with fruit and in fine condition. One morning about four weeks ago I noticed a great many leaves on the ground under the plum tree. I sprayed that and four peach trees with the Bordeaux mixture, but the leaves kept on falling. In two weeks I sprayed again, but derived no

the winter or late next spring, a little closer than ordinarily on account of being stung. I do not think the peach trees would be seriously injured by the stinging of the locusts. Notice that I favor cutting back the new growth of all peach trees just before they leave out in the spring, or during winter where the winters are not severe.

Old-Time Favorite Apples

Green's Fruit Grower:—I write you in regard to some apples that were raised on my father's farm some thirty years ago. My attention was attracted to a little sketch in the recent issue of the Fruit Grower, entitled "A Well-Worn Path," in which you say that the apple known as the Golden Sweet is extinct.

This is one of the apples that I wish to inquire about. The one I have in mind ripened about the time we cut corn, turned a beautiful yellow and had a very oily skin. If this apple has become extinct I certainly regret it, for it certainly was a fine eating apple.

Another apple I wish to ask you about is an apple we called the Pound Sweet. I have seen these apples weigh a pound. They also ripened in the early fall, and my mother always used these to make her apple butter. They had a clear skin and were also very sweet if allowed to ripen. I have not seen them for years and would be glad to learn if this variety is now known.

after 5 o'clock P. M. during the months of April and May, as the sun, although shining bright, has little effect on the germs at that time of evening.

Please give me your opinion on this.

I am a constant reader of your paper and enjoy the contents very much.—Ralf Gaston, Pa.

Reply: While it is not absolutely necessary to hoe once a week around the trunk of a peach tree where the ground is cultivated, it is usually desirable to do so. In any event do not permit rank weeds to grow around any newly planted trees or shrubs.

As regards the sweet clover inoculation, who can answer this question? I cannot.—Editor.

Hardy Apples for Maine

Mr. Harry E. Townsend asks for information whether it is better to set Tolman Sweet trees and graft or not. Has been informed he would have a hardier tree and earlier fruit by so doing. Is going to plant about 9 acres to orchard.

Reply: I see no necessity for regrafting the Tolman Sweet into other hardier trees, for if the Tolman Sweet is not hardy enough for your locality, it would winter-kill even if top-grafted. I have not supposed that Tolman Sweet was unusually hardy.

You can write your state experimental station as to whether it is hardy or not for Maine.

Inquire of the Maine Experimental Station asking them what varieties the station would recommend. Address, Experimental Station, Orono, Maine.

Clean Up the Orchard

Just now the insects which prey upon our fruits are seeking winter quarters. They are preparing for next year's crop of their species. They will be all ready to take the goods the gods provide them next May. Can you not afford to do a little work to circumvent their plans? You can do it, as easy as not. There are three main ways in which the insect crop is carried over to the new year. The worms and bugs crawl out of the decaying fruit upon the ground and burrow in the soil, or seek the shelter of some brush or weed pile. And then in some cases the eggs or cocoons are left upon the tree in the shelter of some flimsy web and decayed leaf cluster. Now, the line of action in fighting them is clearly indicated. Pick up and feed to hogs all the decaying fruit. Burn all weeds and grass and brush so that the ground will be clear about your trees. Then go over your trees and hand-pick all the nests of eggs and cocoons. If you will do this faithfully, you have gone a long way toward making spraying unnecessary.—Exchange.



The above drawing was made by an artist of ability who, evidently being out of a job in artistic work, was brave enough to undertake apple picking as a temporary method of raising money. The apple pickers' line-up is shown at the lower right hand corner. The man overhead with the pipe is the overseer calling attention to the fact that the artist on the long ladder has omitted to pick an apple or two. The artist's excuse for not picking was that a cloud was in the way. The character of the apple pickers is humorously shown in this drawing.

benefit from it. The leaves are about all off and the fruit is beginning to fall. I am very anxious to save these trees, and will you write me at once what can be done? Two of peach trees are in chicken yard, and it doesn't seem that it can be a borer.—Mrs. H. L. Crandell, N. Y.

Reply: It is impossible to tell what is the trouble with your trees without seeing them and knowing all the circumstances. The word "spraying" is as indefinite as can be. The mixture used may have been the wrong thing and may have done more harm than good, just as giving "medicine" to a sick person regardless of what was the disease. Previous spraying with something wrong may have been the cause of all the trouble. Borers can be seen only by examination.—H. E. Van Deman.

Peach Trees Stung by Locusts

Mr. C. A. Green:—I have a nice young peach orchard set out last summer. The locusts have stung them badly. I had the piece of ground disced seven different times each way, but no crops. Will put in alfalfa to-day. Would you prune now? If not, when?—J. M. Connelly, West Va.

Reply: I would not treat the peach trees stung by locusts very much differently from other peach trees except that I would cut back the new growth during

Another apple I wish to be informed about is a large sweet apple that ripened in the fall, but it had a russet skin, not the regular russet, however.

If you can give me any information on any of the above and under what name they are now sold, if known at all, I will be greatly obliged.—David J. Lems, Pa.

Reply: The apple you allude to first is the Golden Sweet, which I find is not extinct, but which is seldom planted to-day. The second apple you mention is the Pound Sweet, which is more often found in the nurseries to-day than the Golden Sweet. We have the Pound Sweet at Green's Fruit Farm, where it is one of the most profitable sweet apples known, very large and productive, sometimes with a watery core. I remember the apple you refer to last, as a russet skinned sweet apple, which I think is not propagated and is scarcely worthy of propagation as it is not so good in quality as Pound Sweet.

A Hard Question

Mr. C. A. Green:—Do you consider it necessary to hoe around young peach and apple trees once a week when they are cultivated once weekly within a radius of 8 inches of the trunk?

Some say it is the heat that kills sweet clover inoculation germs, while other authorities say it is the sunlight or sun rays. I say that in Pennsylvania it is perfectly safe to sow inoculated seed

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Pat'd June 2, 1903.

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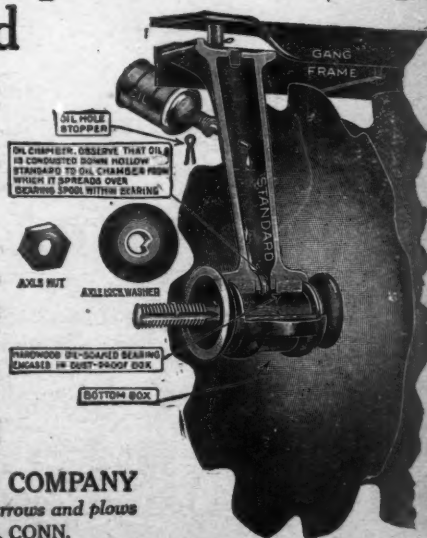
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1096—Basque Dress for Misses and Small Women. (With or without tunic.) Cut in four sizes: 14, 16, 18 and 20 years. It requires $5\frac{1}{2}$ yards of 44 inch material for a 16 year size; without tunic, $1\frac{1}{2}$ yard less. The skirt measures about $1\frac{1}{2}$ yard at its lower edge. Price 10c.



1099—Girl's Coat. Cut in four sizes: 8, 10, 12 and 14 years. It requires 4 yards of 40 inch material for a 12 year size. Price 10c.

1103—Girl's Dress. Cut in four sizes: 4, 6, 8 and 10 years. It requires $3\frac{1}{2}$ yards of 40 inch material for an 8 year size. Price 10c.



1086—Ladies' Skirt with or without Yoke Tunic. Cut in six sizes: 22, 24, 26, 28, 30 and 32 inches waist measure. It requires $5\frac{1}{2}$ yards of 44 inch material for a 24 inch size. The skirt measures two yards at its lower edge. Price 10c.

1082—Ladies' Waist with Body Lining. Cut in six sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. It requires $2\frac{1}{2}$ yards of 40 inch material for a 36 inch size. Price 10c.



1085—Ladies' Dressing Sack. Cut in three sizes: small, medium and large. It requires 3 yards of 36 inch material for a medium size. Price 10c.

1095—Ladies' Apron. Cut in three sizes: small, medium and large. It requires $5\frac{1}{2}$ yards of 36 inch material for a medium size. Price 10c.

Order patterns by number and give size in inches. Address Green's Fruit Grower Co., Rochester, N. Y.

Woman's Dept.

Her Thanksgiving
By Minna Irving

Oh, have you got the turkey picked,
And is the oven hot
And ready for the pumpkin pies?
I'll have to bake a lot,
And currant cakes and ginger snaps,
Of each a heaping tray.
Our boys and girls are coming home
To spend Thanksgiving Day.

I'll make some sugar cookies, too,
They used to like them so
When they were little toddling things—
It seems so long ago.
And apple tarts for daughter Jane,
With eyes of tender gray
She's bringing both her babies home
To spend Thanksgiving Day.

I rose before the peep of dawn,
I had so much to do.
But never have I felt so spry,
Though I am sixty-two.
To cook and bake and boil and brew
Seems only just like play.
With all the dear ones coming home
To spend Thanksgiving Day.

I thank the Lord who gives to us
The sunshine and the rain,
That here in one unbroken band
I see them once again—
Our children and their children, too,
All hastening to obey
The voice of love that calls them home
To spend Thanksgiving Day.
—Christian Advocate.

Hints for the Housekeeper

Don't neglect your canned fruit.
Look it over for any signs of fermentation,
and be sure it is in a cool, dark place.

Sour milk will take the place of sweet milk in cooking if you add one-fourth teaspoonful of bicarbonate of soda. After that follow your usual recipe with just a little less of baking powder.

Canned fruits that have turned acid may be restored by scalding up with additional sugar, or they may be made into a sweet pickle by the addition of sugar, a little vinegar, and a few whole cloves.

If, instead of rinsing the chamois skin used in washing glass or furniture, you simply wring it out in clean suds, you will find it soft and pliable instead of stiff.

Scrambled Eggs with Onions

Take as many onions as are required, peel and cut in cubes, put butter in the frying pan with the onions and steam until soft (do not fry hard). Then add salt and pepper, also a pinch of grated nutmeg if liked. Beat as many eggs as are required, pour over the onions and fry like scrambled eggs. A good sized onion and two eggs make a nice meal, but it all depends on one's appetite. Miss A. Steller, N. Y.

Recipes

Thanksgiving Cake.—Whites of seven eggs beat to stiff froth, two cups sugar, two-thirds cup butter, one-half cup sweet milk, two teaspoonfuls baking powder, three cups flour, flavor to taste. Take the yolks of the seven eggs, add one egg, lump of butter size of an egg, mix same as above except use dark brown sugar or molasses, flavored with spice. Take a large spoon, drop in cake pan one of light and one dark, until all is used. Bake one hour in very slow oven.

Apple Tapioca.—A cupful of tapioca should be soaked in four times its bulk of water for four hours; then stand it over hot water until it becomes transparent. Have ready a good-sized baking dish two-thirds filled with apples that have been pared, cored and quartered; sprinkle over half a cupful of sugar and pour over the tapioca; cover the dish and bake in a moderate oven for at least three-quarters of an hour. Serve with cream.

Pumpkin Pie.—Choose fine grained or pie pumpkin, cook slowly and a long time with only enough water to start it to steam; set back on stove, stir often until it is cooked down quite dry; then put through colander, sweeten to taste; add a little salt and spice with ginger, nutmeg and a very little cinnamon. Thin up with good rich milk and eggs, allow-

ing two eggs to a pie. Squash used in the same way makes pies preferred by many to pumpkin.

Apple Pie.—The following is a unique form of apple pie, which tastes and looks much like a pumpkin pie: Grate some rather sweet apples, and for every three apples use a cupful of sugar, two eggs, a teaspoonful of powdered ginger, a scant teaspoonful of mace, also powdered, and half a teaspoonful of grated nutmeg. Beat the grated apples with the sugar and spices, then stir in the eggs. Bake with an under crust only.

Plum Pudding.—Two eggs, three cups flour, one cup molasses (warmed slightly), one cup sour milk, one-half pound stoned raisins, one-half pound currants, three-quarters cup shredded citron, one-half cup sugar, one teaspoonful cinnamon, one teaspoonful salt, one saltspoonful ginger, one and one-half teaspoonfuls soda dissolved in hot water, one-half cup suet. Beat eggs, sugar, molasses and suet to a cream. Add the spice, salt and two-thirds of the milk. Stir in the flour. Beat well. Add the rest of the milk with soda; beat well. Next put in the fruit well dredged with flour. Steam in a well buttered mold four hours.

French Beets.—Cook beets in plenty of water until tender, but do not break skin by removing taproot or by cutting the tops too short. When done, remove skins and cut beets up into small cubes and serve with the following sauce: For one beet use one-fourth cup vinegar, one-half tablespoonful butter, one-fourth tablespoonful corn-starch, one-fourth teaspoonful salt, one tablespoonful sugar. Heat vinegar in double boiler. Mix other ingredients and add. Cook until thick. Stir the beets in and serve hot. This is an excellent way to use cold beets left over from a previous meal.

The Horn of Plenty as a Symbol of Thanksgiving

The cornucopia, or horn of fruitfulness and abundance, always used by the Greeks and Romans as the symbol of plenty, is an apt expression of the sentiment that prevails on Thanksgiving day.

The laundress says that prints and colored muslins should never be soaked for any length of time before they are washed. Half an hour is the limit, and the addition of salt to the water does much toward the fixing of the color.

The articles should then be wrung out, and dropped at once into a good lather of warm, but not hot, water.

After squeezing and working them thoroughly with the hands, first on the right and then on the wrong side, they should be again wrung out, placed in cold water, wrung again, and rinsed in cold water, then finally replaced in the salted water until they are required for starching. Should no starching be required, the articles should be wrung out and then dried.

How to Keep a Cook

"Fifteen years ago," said one of her friends, "Mrs. Broun wanted a cook. So she consulted her nurse.

"Um," said that autocrat. "Um, I know a ooman. But I dunno whether she suits dis house or not."

"Mrs. Broun persuaded her nurse to send for the cook. Next day the nurse told her that the 'ooman' was in the kitchen. Mrs. Broun went to interview her. A large black woman rose and curtsied when she came in.

"Now, honey," said the large black woman, "you and me is gwine to git along jes' fine. I can see dat. So you run along upstairs and 'tend to yo' quality business and I'll stay down heah in the kitchen and 'tend to mine."

And it was so ordered.

True hospitality is not to be found to-day as it should be, because people are so busy with their own affairs that they have little time to spend with others in a social way.

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DIRECTIONS.—Set gauge on the floor so that the skirt will fall over the long wire, making it come under or inside of the skirt. Fold the goods under, so that the long wire will come inside the fold, as shown in illustration No. 1 and pin the hem in place. Slide the gauge along and repeat. The Ezy-Hem can easily be used as a chalk marker also. Place the gauge with the long wire finger outside and against the goods, and simply draw chalk along the wire lengthwise, using the wire as guide or rule.

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GREEN'S FRUIT GROWER, Rochester, N. Y.

The Staff of Life

Written for Green's Fruit Grower by IDA DONNALLY PETERS

There is a legend to the effect that wheat is one of the fruits of the earth that Adam toiled over after his banishment from the garden of Eden. Be that as it may, there is no doubt wheat was grown in prehistoric times.

The Chinese considered wheat a direct gift from Heaven and cultivated it 2700 B. C.; the Egyptians ascribe its origin to Isis, and the Greeks to Ceres. Ancient monuments show that the cultivation of wheat had been established in Egypt before the invasion of the Shepherd Kings.

There is a story in one of the ancient Greek books of a goddess who came to abide on earth for a time. She fell in love and married a mortal youth. She was recalled to Olympus. Her husband was inconsolable until, placing in his hands a cornucopia of seeds with instructions how to use them, she bade him go forth into the world and spread the seeds and knowledge throughout the earth that all men might have food.

He obeyed her, and in doing for others found ease for his own aching heart.

Pounding wheat into flour and mixing it into some kind of paste have been traced back thousands of years, and of course the process has been improving all the time, yet the intelligent housewives of to-day are always looking for easier, better and cheaper ways for using the flour of wheat.

MINUTE BISCUITS

One pint of sour milk or buttermilk, one teaspoonful of soda, two teaspoonfuls of melted lard. Flour to mix soft dough, just stiff enough to handle. Mix, roll, and cut out rapidly, with as little handling as may be, and bake in a quick oven.

BISCUITS

Two cups of flour, two teaspoonfuls of lard, one teaspoonful of salt, one teaspoonful of baking powder, one cup of milk. Sift the flour, baking powder and salt together, add the lard and rub it into the flour until it looks like cracker dust. Add the liquid, mixing it into a soft dough with a fork. Toss on a lightly floured board until coated with the flour and knead quickly until soft. Roll about one-half inch thick and cut. Butter top of each with melted butter or wipe with milk. Bake in a moderately-hot oven about twenty minutes, or until well-puffed and brown.

FRENCH ROLLS

One quart of flour, half teaspoonful of salt, one tablespoonful of good yeast, half pint of milk, two eggs, one tablespoonful of melted butter. Stir the salt into the flour, adding the yeast, milk and eggs. Knead thoroughly and set to rise. Next morning add a generous lump of butter. Make the dough into small rolls and bake.

POPOVERS

Two eggs, half pint of milk, half pint of flour, quarter teaspoonful of salt. Beat the eggs well and add the milk and salt; then slowly sift in flour while stirring, and take care to have no lumps. Grease the gem pans. Fill half-full of batter and bake for thirty-five minutes in a moderately-hot oven.

CURRANT BUNS

Take piece of light dough mixed for French rolls, and roll out into a large sheet. Spread with melted butter, sprinkle on it sugar, cinnamon and currants, which have been well washed and dried. Make into long rolls like roly-poly and cut in pieces about two inches wide; put these in a greased pan. Brush the tops with butter, and let them stand until they have doubled their bulk (twenty-five to thirty minutes). Bake in a moderately-hot oven and when they begin to brown brush the tops with sugar and water.

WAFERS

One pound of flour, three tablespoonfuls of lard, saltspoonful of salt. Mix with milk into a soft dough, roll very thin, cut into tiny round cakes, and again roll these as thin as they can be handled. Lift them carefully, lay in a pan and bake quickly.

DROP MUFFINS

One and one-half cupfuls of flour, three and one-half teaspoonfuls of baking powder, three tablespoonfuls of lard, half a saltspoon of salt. Sift together flour, baking powder and salt. Work in the

lard, using the tips of the fingers, then add gradually three-quarters of a cupful of milk or water. Drop by spoonfuls in buttered hot gems pan and bake in a hot oven.

FIG MUFFINS

One cup of chopped figs, one pint of flour, two eggs, one tablespoonful of lard, one quart of milk, or enough to make thin batter, one teaspoonful of sugar. Mix thoroughly and bake quickly.

LOAF BREAD

At noon-time dissolve one cake of compressed yeast in a pint of lukewarm water with enough flour to make a thin batter. Let stand until night. At night scald a pint of milk, let cool, and add a tablespoonful of sugar, a teaspoonful of salt and an even tablespoonful of lard. Add same to yeast batter. Then add flour and beat until you have a dough. Turn out on a board and knead until it is soft and spongy. Put back into the bowl and stand in a warm place over night. In the morning knead and let rise until double its bulk. Then form into loaves and put into greased pans. Let stand until light. Brush with water, pick carefully on top with fork and bake in a moderate oven forty-five minutes. Let cool without wrapping.

GINGERBREAD

One teaspoonful of salt, one teaspoonful of soda, one teaspoonful of ginger, half cup of sugar, one cup of New Orleans molasses, one egg, two cups of flour, two tablespoonfuls of lard. Mix salt, soda, sugar, ginger and lard and pour in a cup of hot water and a cup of New Orleans molasses. Let stand until nearly cold, then put in one egg and two cups of flour. Beat lumps out and put in buttered pan. Bake in a slow oven.

NUT BREAD

Two cups of graham flour, one cup of white flour, two cups of sour milk, one cup of sugar, one cup of chopped walnuts, one teaspoonful of soda, two teaspoonfuls of baking powder. Mix thoroughly and bake in a moderately-hot oven.

BREAD CRUMB PANCAKES

Two cupfuls of bread crumbs, two cupfuls of sweet milk, two eggs, one tablespoonful of butter, one cupful of flour, two tablespoonfuls of baking powder, half teaspoonful of salt. Bread crumbs must be fine and the measurement of them must be scant. The crumbs must be soaked in milk until they are soft, the flour, the salt and baking powder should be sifted together. Add the butter in a melted state, the eggs—whites and yolks beaten separately—and mix all to a smooth paste, rather thin. Cook on a hot, well-greased griddle, and serve at once. These cakes are delicious served with maple syrup.

WHOLE WHEAT FLOUR

Wheat embodies a combination of the most valuable elements known to the animal and vegetable kingdoms. People are finding out that in the process of making flour snow-white, some of the nutritive value and the most vital properties are taken out. For this reason there is a slow growing tendency to get back to the whole-wheat flour.

Most of the foregoing recipes will admit of the whole-wheat grades of flour if you choose to use them. The one-minute biscuits are particularly delicious, also digestible, made of the whole-wheat.

New Grape.—Mr. J. C. Jacoby, of Ohio, sends a sample of grapes which he thinks will be a valuable addition to the grape family. He claims this grape is a seedling from Moore's Diamond (white). The vine is very young and small, not being thicker than a lead pencil, and had on it three bunches of grapes like the one sent. This ripens two weeks ahead of Early Ohio or Worden. Vine hardy. What is your opinion regarding it?

Reply: I have the bunch of grapes. The flavor is pleasant and enticing—the pulp is not tender enough to make the grape a variety of high quality. The berries do not seem to cling very closely to the stem. You cannot judge of a new variety by its first fruiting; it has to fruit four or five years before its character is fully established.

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Ye Ancient Cidermill

Written for Green's Fruit Grower by
Chas. A. Banister

A crisp clear day in early fall,
And free to wander where I will,
I blithely hail a farmer tall
Taking his fruit to the cidermill.

I think an artist would like to paint
This picturesque cidermill.
With the characters quaver who gather here;
The yarns they spin a book would fill.

An ancient horse goes round and round,
The apples are shoveled into a chute,
Are rattled, bounced, and crushed and ground,
And then the pomace is colored to suit.

Laid up in tiers with straw between,
For rot and worms none seem to care,
Nor try to keep things neat and clean,
Though each is sure to get his share.

When the Jackcrews press upon the plank,
The amber juice, like swollen rill,
A mimic freshet pours into the tank,
And small boys haste to drink their fill.

Most Miserable Men

Entombed in a grim castle on the outskirts of Lisbon are some of the most miserable men on earth. These are inmates of Portugal's "Prison of Silence," says Manchester News. In this building everything that human ingenuity can suggest to render the lives of its prisoners a horrible, maddening torture is done. The corridors, piled tier on tier five stories high, extend from a common center like the spokes of a huge wheel. The cells are narrow, tomb-like, and within each stands a coffin. The attendants creep about in felt slippers. No one is allowed to utter a word. The silence is that of the grave. Once a day the cell doors are unlocked and the half a thousand wretched march out, clothed in shrouds and with faces covered by masks, for it is part of this hideous punishment that none may look upon the countenance of his fellow-prisoners. Few of them endure this torture for more than ten years.

Apples and Their Use

Written for Green's Fruit Grower by CALVIN FORBES

THE pictures that accompany this article are taken of trees that were set out nine years ago, and are printed that I may better illustrate what I would like to say about the apple and its various products.

The land upon which these trees are making their tenth year of growth is poor—"too poor to raise white beans"—as the saying goes. But they are sending their roots down deep into the sand, and the beautiful red apples out on their spreading branches.

When these trees were sent to this place to be planted, some of the natives said, "He is a fool." Others said, "He is crazy." Now they are willing to accept a basket of the finest apples that they ever saw.

There are in this orchard a thousand trees of the Wealthy apples. Oh! the Wealthy apple. It is the most beautiful apple that grows. Its flavor is delicious. A year ago a friend who is also an apple crank sent me two apples from the Chicago apple show. They were raised in the far west. They were large and handsome. It cost my friend ninety-five cents to purchase and express these two apples to me that I might see them. Here on the table to-day are apples perhaps not quite as large, but more beautiful and of very much better flavor, and they are raised in the midst of an ample market. A load of these apples go into the town where they are mostly marketed, and the men who are fruit fanciers gather around the wagon and we hear all sorts of expressions praising their beauty and excellence.

old trees properly they would get more money for the crop than they now get from their whole farm.

Every year that I live and see these trees come into productiveness I am more and more enthusiastic over the apple and what can be produced from it.

If I had a boy or a girl to whom I wanted to leave a fortune, and could not accomplish it without, I would mortgage my automobile and buy a piece of land and set it out to apple trees. I would neglect my hunting and fishing trips that I might take care of the trees, and before very many years—if they were of the "Wealthy" variety—I would see their branches bending toward the ground with the weight of the most beautiful fruit, and my children and my children's children would call me blessed.

Fudge, Nonsense

A beautiful new flower has been evolved by a resident of California who has succeeded in budding a rose to a blackberry bush. Following the budding, the bush grew rapidly and bore profusely, and the



The upper lefthand photograph represents apple trees, nine years after planting, bearing heavy loads of fine fruit. The upper righthand picture represents a scene in Calvin Forbes' orchard where the trees are filled with apples, as does the photograph directly under the two men standing. The lower photograph represents a young orchard recently planted by Calvin Forbes, of Michigan, whose interesting article will be found on this page.

delicious jellies may be made from the juice of the apple. We are putting up hundreds of dozens of apple jelly into half pint glasses and selling them by the dozen. To show these beautiful and transparent fruits to a hungry person produces the same effect that a well ripened watermelon has on a half-starved "pickaninna." Then aside from the cider and vinegar is the old fashioned, yet always palatable and salable apple butter, "such as mother used to make when she lived down in Ohio."

There are a dozen or more ways that the apple can be used and put into glasses. When once it is well put up in attractive glasses and properly labeled it is a healthful and delicious food, and is sure to find a ready market. If one had the facilities for putting up the entire crop in this way there is even a better profit on the No. 1 fruit than in selling it by the bushel.

All around me are old apple orchards bearing no fruit that is salable. The worms and insects are getting their share, and the farmers are raising a little rye, a few white beans and a little yellow corn, when if they would trim and spray the

new flower is white with irregular leaves shooting out from the center very much like the bloom of a carnation. The foliage and stems retain the characteristics of the blackberry. In spite of the many crosses made by botanists, they have resulted in the creation of relatively few new fruits for consumption.

Note: C. A. Green says above is bosh. If the rose scion could be made to grow on the blackberry (and we do not believe it can), the rose scion would produce roses.

TESTIMONIAL

Knox City, Texas, July 27, 1914.

Green's Fruit Grower:—Your monthly magazine on useful fruit, and in fact everything, has been handed to me and I have read several numbers. I am an old man of 62 years of age, an old Texan, but take a lot of interest in tree culture, flowers and garden. Your magazine has a great many practical ideas which causes me to send you my subscription.

F. C. Wink.

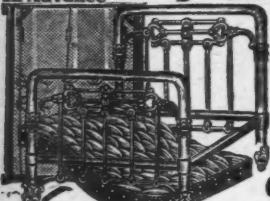


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Sixtieth Anniversary SOUVENIR BARGAIN BOOK FREE

Increasing the Margin of Profit

Written for Green's Fruit Grower by J. S. UNDERWOOD

EVERY merchant has the cost price as well as the selling price marked on his goods in figures that are plain to him, if not to his customers. If the customer demands a price that is lower than the one asked, the merchant knows just how far he can go in meeting the demand without losing money.

Unfortunately we as fruit growers and farmers have no secret mark to guide us and we seldom know the cost of our goods. This is not because we are shiftless and careless, but because it is far more difficult for us to determine the cost of an article that we produce than it is for a merchant to know the cost of an article that he buys. Many factors enter into that cost and most of them are variable factors that are seldom twice alike. Even should the cost of growing an acre of potatoes or any other crop be the same this year as last, variations in yield may make the price per bushel or per pound differ widely. None of these things, however, lessens the importance of the cost mark. We hold no special permit that will enable us to violate the laws of trade without suffering the penalty.

We cannot sell below cost and make money on the transaction, and this fact we must keep clearly in mind. If the cost

sale be made much lower than it is at the present time.

The middleman is not always to be condemned, for he plays an important part in the problem of distribution and often proves the most satisfactory and least expensive means of making sales, but he should not exact unreasonable fees for his services. We must remember that we have to bear the cost of selling, even if we make the sales ourselves, and sometimes the cost is heavier under these conditions than when the produce is sold through the middleman. The man who spends half a day with his team in selling ten dollars' worth of produce direct to consumers is footing a heavy bill for the cost of selling, as well as the man who turns his produce over to the middleman. On the farm as well as elsewhere it is in the margin of profit that lies the kernel of financial success, and the problem deserves the best thought that can be given to it.

Plums and Other Things

Written for Green's Fruit Grower by Mrs. F. C. Johnson, Colo.

"I do not care for plums, they are so lacking in flavor and have such tough skins," a lady remarked in my hearing.



This is a Niagara peach orchard which has borne many crops of superior fruit. My opinion is that the trees are set too closely together and that there may be a lack of free circulation of air and free access of sunshine which are so essential to the best results of any kind of tree fruits. And yet these rows of peach trees seem to be about the usual distance apart, that is 15 to 18 feet.

of producing a bushel of some product is forty cents, there is no profit in selling it at forty cents, no matter how many thousand bushels may be grown. The chief point is to make the margin between the cost and the selling price as great as possible, and several factors enter into the accomplishment of this. First in importance is economical production. Only good crops pay, but not all good crops pay. It is possible to obtain a good crop and to do it at a cost so great that there is left no margin of profit. On the other hand it is just as easy to err on the other side by failing to put enough expense into a crop to get the best returns.

In the production of a crop certain fixed expenses must be borne, and these will be about the same whether the yield is heavy or light. It is often the case that though with this initial outlay alone the returns may be made to equal or perhaps slightly exceed the cost, if a little extra money is spent in the way of fertilizers, better care and tillage, the returns may be greatly increased. The most obvious way to increase the margin of profit is to increase the selling price. If it costs forty cents a bushel to produce a crop, there is as much profit in selling one bushel at fifty cents as in selling two bushels at forty-five cents.

On staple articles of standard grade we cannot expect to set our own selling price, but on unusual products of high quality we may often do this. Another point that has an important bearing on the margin of profit is the cost of selling, and to-day this problem is receiving the attention that it deserves. This cost is bound to be high, but it should under average conditions of distribution and

Poor woman, she knew very little about good plums. The far West had given her a taste of the fruit called by that name.

There are plums and plums, my lady. Go with me to the "old home on the hill" in western New York, and see the trees loaded with plums, such as grow nowhere else—the beautiful little Golden Drop, with its small stone and thick meat, with a flavor that you never tasted before. For canning, no plum equaled them. Two trees of Sugar Green Gage, we called them, so delicious one could hardly keep the juice in one's mouth; excellent for drying. I can remember the numerous plates and platters of them drying in the oven of the old cook-stove in the long ago. There was one tree of Imperial Gage, so large and juicy the fruit was better for eating out of the hand. The Washington Plum, a large blue, was delicious for preserves and also for making jelly.

Numerous trees of the little Damson gave bushels of that highly prized plum for preserves. My father was much discouraged when they came into bearing, they were so small, but was greatly surprised as well as pleased to find a good demand for them in town for preserving. We never appreciate what we have in anything, until deprived of it. So it is with fruits. Here on the Great Plains of Colorado, where fruit is a luxury, and most people think raising it an impossibility, anything that is fruit tastes good to us. Many times I go back in memory to the old home cellar with its bins and barrels of apples and pears, the bushels of grapes packed away in oats. The big cupboard containing the canned fruit, preserves and pickles. The

jars of ripe cucumber pickles and pickled pears. There was generally a barrel of cider and at the side of the stairs always stood the pork barrel—and such pork! The Western corn belt folks have no such pork, or at least I never ate any. How sweet and tender it was, such great thick slabs of side pork. In the long cold winter after a ride home from church, what could taste better than the pork and beans, or boiled dinner with apple sauce and fruit cakes, and often apple pie? My father had a way of cutting his pie into a bowl of milk, which I never saw any one else do. Mother loved dead-ripe pears cut into her bread and milk for lunch; Bartlett's and Sheldons she loved best, but all in their season found a place in her bread and milk. It was salt-rising bread, too, something one rarely sees in the West, and far less in the East than in former years. As we grow old, the years that are passed come back to us with floods of memories. But one of the most pleasing pictures that come back to me is the orchards of fruits and grand old maple trees of "the old home on the hill."—Mrs. Johnson, Colo.

Great Need for Apple Advertising

By H. F. Davidson, President North-Pacific Fruit Distributors, in The Apple World

Bananas are a most excellent food fruit when they are allowed to mature sufficiently before being cut from the plant, but when cut absolutely green, as they must be in order to stand the transportation necessary to get them to us in sound condition, the real food value is largely lost.

People have been educated to use these and many other fruits through persistent

advertising. Producers and dealers in these fruits have employed good talent to set forth their value as food products, and have even gone so far as to induce prominent physicians to recommend their use as a means of promoting good health.

The apple, which is produced in our own country to the extent of 50,000,000 to 60,000,000 barrels, or 250,000 to 300,000 carloads, is a common food product, and a real article of food, so common, in fact, that it is seriously neglected by its best friends. It is difficult to understand why people with delicate stomachs will use fruit with such strong acid content as grapefruit, or bananas that were cut so green that they are unfit for food, when they have available, at least ten months of the year, such luscious, healthful, nourishing fruit as the apple. There are more than 57 varieties, each one of which can be served in 197 different ways, which is certainly a sufficient variety for the most fastidious.

Apple shippers must demand of the dining-car people that they serve a properly baked apple of the proper variety for ten cents, and the dining-car people, hotel people, restaurant people, and the housewives must be educated to know the right variety to serve in the different styles, and they must be supplied with apples at a reasonable cost, so they can afford to use them regularly in large quantities.

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As low as 60c per roll, new bargain catalogue samples to test all FREE. Direct from my 7 factories, at Pittsburg, Kan. City, St. Paul, San Francisco, Scranton, Cincinnati and Chicago.
W. E. McCarron & Co., 958 Dickey Bldg., Chicago, Ill.

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use our

Farm Record Book

and

FIND OUT

The Farm Record Book contains complete records for one year of ordinary farming. By its use the farmer can keep a record of not only what he has to sell and buy, but what he eats and uses for the farm. He can by keeping the Daily

Record of Labor for teams and men, and adding to it cost of seed, tell what any crop costs him, and whether he is making any money on the crop or not.

This Farm Record Book is meant to help you run your farm as a business enterprise. Keep it where you can see it every day. Take a few minutes each evening to write in the items covering that day's business, then spend a little time summarizing the results at the end of the year.

The Farm Record Book is easily kept with only a little care, does not require a knowledge of bookkeeping, and has ample space devoted to records of the following items of interest and importance on every fruit farm: Cash Account, Daily Record of Labor, Diagram of Farm, Poultry Breeding Record, Egg and Poultry Record, Stock Breeding Record, Products of Farm for One Year, Inventory of Stock, Tools and Crops, Planting and Seeding Record, Orchard and Fruit Acreage, Improvements Made—Painting, Roofing, Papering, Fencing, Cement Work, General Repairs, Record of Insurance, Notes and Mortgages.

We will send one of these 32-page Record Books to any subscriber who sends us 50 cents to renew his subscription to Green's Fruit Grower for one year. Don't delay! Start your record at once.

GREEN'S FRUIT GROWER, Rochester, N. Y.

Apples Per Acre \$600
Potatoes " " \$250



Make Your Own Crop Prices!

With a Goulds Reliable Sprayer you not only increase your yield, but you grow a higher grade of fruit. Thus you take two extra profits—one on quantity and one on quality.

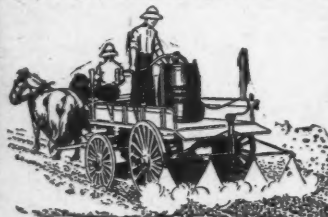
Spraying is useless unless it is done effectively. Every leaf, every crevice must be saturated with solution. Goulds Sprayers apply the mixture in just the right form and quantity. They are made by experts in the largest exclusive pump factory in America.

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The pump, fittings, entire equipment are constructed to last, to withstand chemical action. All working parts are made of bronze. The improvements are new, practical. They are the result of countless experiments, of the application of skill and long experience by trained engineers. Get the best spray outfit to start with. Cheap outfits are time and money wasters, more costly in the long run.

Get Free Spray Book

40 pages, illustrated. Packed full of facts you want to know. Spray formulas, spray calendar, how to mix and apply, how to prevent and destroy insects and diseases, what sort of sprayers to use, a volume of valuable information. Write for it today.



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Virginia Apple Orchards

frequently net as much as \$500 an acre from one crop. Peaches, pears, plums and small fruit do equally well. Ideal climate for fruit-growing. Good, well located fruit lands, on railroad, can be bought as low as \$15 an acre on easy payments. Write today for particulars. F. M. LeBAUNE, Agricultural Agent, Norfolk & Western Ry., Room 221 N. & W. Bldg., Roanoke, Va.

When you write advertisers
Please mention Green's Fruit Grower.

Fall.

Oh, apple time and older time,
And time of pumpkin pies,
Of stubblefields and naked trees,
Of clear and cloudless skies;
Of babies jacketed and warm
With dancing curls and feet
And red, red cheeks and glinting eyes
In every nook and street.

And harvest moon and mockbird songs,
And fieldlark's roundelay;
And goldenrod and heather-bloom,
And thistledown at play;
And amber-colored morns and eves,
And hazy nights and still;
And the sad call at eventide
Of lonesome whippoorwill.

The hazy time, the lazy time,
The cozy time of year;
Of dusty ways and short'ning days
And nights of autumn cheer;
Take down the fiddle and the bow
And wake the old-time tune
To autumn's cheer and winter near,
And the round harvest moon.

—Houston Post.

Profits from Summer Apples

Written for Green's Fruit Grower by
John E. Taylor

Wallace Emery of Somerset county, Maine, after several years' experience has come to the conclusion that raising the summer apple is a profit not equalled in other fruit growing. He has 2,500 trees of the Red Astrachan and Duchess varieties, and about the middle of August he begins the harvest of them. A part of these he sells in bushel boxes at a dollar and a half each, and the rest are

APPLE EXPORTS

Shipments from All Ports Much Heavier than Year Ago.

New York, Oct. 16.—Apple exports from all American ports for the week ending last Saturday were 183,955 barrels against 107,940 barrels for the same week a year ago. Of the shipments last week, New York shipped 60,744 barrels; Boston 43,669; Montreal 31,542; and Halifax, Nova Scotia, 48,000.

According to a cable from Liverpool to the Simon, Shuttleworth & French Company the first of the week, there was a good, active demand there for fine fruit. The cable, however, said that some of the apples were arriving in a heated condition. York Imperials were bringing \$3.50 to \$4.00, Ben Davis \$3.25 to \$3.50, Hudson River Baldwins, \$2.50 to \$3.00.

Refrigerator space on all boats running out of American ports is exceedingly limited. If shippers want to send their fruit over under refrigeration, they have to engage space two weeks in advance.

Glasgow cables Wednesday denoted a good active market. Hudson River Baldwins were bringing \$2.75 to \$3.50; Canadian Kings, \$5.00 to \$6.00; Albermarle Pippins \$4.25; Virginia Yorks \$3.50 to \$4.00, and Jonathans and Winesaps \$4.50 to \$5.00.

APPLE MARKET ACTIVE.

Chicago, Oct. 16.—There was a very

year than any previous season. The consuming public is taking hold at prevailing prices. Both barrel-packed stock and bulk are finding a fair demand on most markets where the packed and unpacked goods are handled. The jobbing trade in the southern sections where business conditions are not all shot to pieces by the cotton deal, report they are giving special attention to apples. Country trade is being worked hard with the well graded and packed stock which this year is, owing to the new law, being handled with much better satisfaction. Most of the trade continues to work largely on fall varieties, which are cleaning up. Twenty Ounce, Yorks and Maiden Blush having the call. Later varieties just coming in are going on the price lists and will be leaders by the first of the month. Some dealers are now pushing Baldwins, Kings and Spies. Here and on the other Ohio Valley markets the quotations in a jobbing way range as follows: York Imperials, No. 1 pack \$2.25 to \$2.50; Kings, Spies and Twenty Ounce \$2.50 to \$2.75; Baldwins, \$2.25 to \$2.50; Winesap, Stayman and Black Twigs \$2.75 to \$3.00; Grimes Golden \$2.25 to \$2.50; Wealthy, Gravenstein and Alexandria \$2.50 to \$2.75; Greenings \$2.00 to \$2.25. Hand-picked bulk apples from car doors bring \$1.25 to \$1.40 per barrel measure; western box apples \$1.00 to \$1.50 as to variety and pack.—The Packer.



Orchard entirely planted to profitable summer apples, owned by Wallace Emery, Maine.

put up in gallon cans for winter sale. In doing this he does not have to run his apples in when the market may be low. There is never a time when he cannot sell his canned apples, and the cost of canning them is comparatively small. For many years he had a small cannery in one end of his shed and made a profit of \$500 from a few trees. He then began to extend his operations until now he has the biggest summer apple orchard in the county. The trees are prolific bearers and even last year, when fruit of the later varieties was scarce in Maine, his trees were so loaded with fruit that from one-half dozen to fifteen poles were required to prop the limbs to keep them from breaking they were so heavy with the fruit. During the present year the trees are propped to save them from breaking. Many of these trees produce ten bushels each.

In connection with the raising of this fruit he has now put up a small canning factory to dispose of the fruit as fast as it is ripe. He also makes the cans, thus saving cost. His trees that are now bearing very heavily were set out about four years ago on a sloping ground that is somewhat enclosed in woods to protect the fruit from the heavy winds. Mr. Emery is of the opinion that if one wishes to enter the orchard business and get quick returns this kind of fruit is the most profitable.

If I have done aught for you, O friend,
I do not ask that you return the favor,
but do for God's sake pass it on.
—James Howard Kehler.

good tone to the apple market here this week. Ideal weather conditions prevailed, and although receipts were liberal, the cool spell brought about an increased demand and a very good movement resulted. Arrivals showed up of excellent quality.

There was good trading in bulk apples, but Western box apples continued to drag. The healthy trading in other kinds curtailed the movement into storage somewhat, but considerable apples went into coolers, due to the large receipts.

Wealthies in barrels brought \$1.75 to \$2.50; Baldwins were salable at \$1.75 to \$2.00; Kings brought \$2.25 to \$2.75 and Jonathans were quotable at \$3.50 to \$4.00. Bushel baskets in various varieties sold at \$3.50 and \$5.00.

There was a quiet feeling in the crab-apple market. Receipts were light, and offerings consisted mainly of stock taken from storage. Hyslops sold at \$4.50 to \$5.00 a barrel; in bushel baskets they were salable at \$1.25 to \$1.50.

Receipts of quinces were light and mostly of poor quality. The demand was limited and for good stock; as most of the offerings were of poor or ordinary quality, the market was dull and prices easy. Eastern barrels sold at \$3.50 to \$4.00 and in bushel baskets they were salable all the way from \$.50 to \$1.35.

ON OHIO VALLEY MARKETS.

Cincinnati, October 16, 1914.

Bulk goods continue to roll freely and from advices it is evident a much greater volume of apples will be consumed this

Statement of Ownership and Management.

Required by the Act of August 24, 1912, U. S. Post Office, Div. of Classification.

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Marion E. Granger..... Rochester, N. Y.
Frank W. Marts..... Boonsboro, Md.
Henry A. Brinkman..... Lehighton, Pa.

Signed: Charles A. Green,
Editor and President.
Rochester, N. Y., Sept. 23rd, 1914.

MAKE LOTS OF CIDER

Farmers for Miles Around Bring Apples to Spencerport, N. Y.

The Spencerport Apple Products Company is working a full force of employees night and day in the cider mill and is grinding over 3,000 bushels of apples daily. The company has no trouble in securing the fruit, as farmers from ten and twelve miles away are drawing their apples here.

The company allows the farmers to draw home the pomace without charge, for trial, and believes much saving can be made in this way. It can be used for filling silos, thus saving land for other crops that is now devoted to silage corn. Experts say that, pound for pound, it is practically equal, in feeding value, to the average quality of silage corn.

A Message From Maine

Written for Green's Fruit Grower by C. H. TROTT

E. J. Fenton, at present traveling for a well known nursery company, is a retired orchardist. He has passed the seventy mark, and sold his farm because he is widowed and his children are all married. For many years he did grafting and pruning for the public, at a nominal stipend, and recounts interesting experiences for the benefit of beginners. A look at his old home in Maine is an experience to cause the embryo orchardist to compare many neglected and wasted areas with this compact eldorado. Every move on the place appears to have been made with a purpose, and, although the new owners have made some changes, in the main the prevailing scheme has been maintained as of old.

When Mr. Fenton bought the farm it contained a large garden of small fruits, among them raspberries and blackberries running riot and yielding as they willed. The new owner had little practice, but many and decided theories, a little book lore, and unmeasured zeal along with his youth. So he took his knife in hand and attacked that straggly raspberry patch first. It was spring, and new canes were coming on fast, not much higher than two feet. A few inches were snipped off the top of every new cane, resulting in the appearance of several new branches starting out lower down on the main stem. After the fruiting season he cut out all the old canes except these present season's canes, as orchardists claim this old wood, as well as a dead branch on bush or tree, saps as much vitality from the root as the new, vital, vigorous growth absorbs. The following spring he continued his snipping process by amputating the side branches that had sprung from the main stalk of the year-old shoots. Further, he thinned out the abundance of new shoots that were breaking ground from the roots, believing that the shortened, thickened, stouter year-old canes would bear more plentifully if so treated. A sturdy patch was the result, and Mr. Fenton never depended on canes more than a year old. These, being so dwarfed, needed no trellis and needed no winter covering.

Some raspberry culturists, growing taller stalks, bend the canes down in the fall, pin them to the ground, and mulch. Mr. Fenton never pegged them down, but he did mulch with barn compost about freezing time, then covered that with a scattering of straw, to protect the roots and to enrich the soil, remembering that leaf mold feeds the wild raspberry roots in the woods. Again, in the spring he recalled the fact that wild raspberries grow rampant where brush has been burned, and liberally scattered wood ashes among his canes, never, however, applying it simultaneously with the dressing, which would free the gases and waste the wealth of root food.

As long as he could get the horse between rows he cultivated the patch to keep down weeds. When the plot became too much grass-bound he changed the location. To do this he transplanted new shoots from his old patch, which he could do to better advantage than to buy elsewhere, for he lost quite a percentage when trying to bring them a distance. The young plants had to be taken up with a length of root two or three inches long or more, and he could set them in the new rows immediately, working just before a rain or before sundown when he could water them and leave them to the cool and darkness before facing the sun. He planted them three feet by six, and now says he should prefer still more room, to admit the team between, and plant some short-growth vegetable between rows after the season's cultivations were over. He planted reds exclusively and limed his soil. Black raspberries favor acid land, which would have saved him expense, but in his locality red berries market more readily.

At that time Mr. Fenton's success followed a system of steady cultivation of the ground, to conserve the moisture, keeping it up through the dog days. He carefully viewed other methods, especially fields where canes were grown in hills five or six to a hill, and the stems tied together, with no lateral root-shoots springing up in the rows, and the bushes five to six feet high, leaning over a single strand of wire trellis, in a patch where

no pruning is done from top or laterals, and where enormous crops are raised. "Every man to his method," says Mr. Fenton, and upholds his own.

His currants were never allowed to reach a height of two feet, and seldom grew more than half a dozen main stems. His plum trees in early life had to be content with a dozen lateral branches, and the cherry with fifteen or sixteen, and neither were ever allowed to run up tall and spindling.

MEAGERNESS OF FARMER'S FRUIT LIST

Mr. Fenton deplores the meagerness of the general farmer's fruit list, declaring that countless varieties, now taboo by the average northerner, because of climatic conditions of peculiarities of soil, could, with a little thought and experimenting, be cultivated without extravagant cost in quantities sufficient to supply the home table. While it is important to include the entire garden within the fenced area, the soil therein may not be adapted to every style of fruit that can brave the northern winters. "Adapt it, then," advises Mr. Fenton, "If your light, sandy soil, suitable to so many small fruits, will not cater to the plum's needs, it is not a back-breaking proposition to transfer earth to fill the excavations demanded by the few plum trees. It needn't be the work of one day. The orchard is to last through the years, although the berry patch is to be changed. And here is a point Mr. Fenton insists upon: The raspberry patch should last ten to twelve years, whereas the ordinary grower uses it up and starts a new one in one-half or one-third of that time, simply because droughts have sapped the vigor of the roots. He claims thorough, shallow cultivation, both for raspberries and blackberries, not deep enough to cut the roots.

As to hardiness, Mr. Fenton advances a notion that is so new as to be refreshing. He thinks it worth while to inure certain fruits heretofore considered too tender for the North, to see if they will not become sturdy enough for frost-resistance. To uphold his theory, he cites the case of corn, which will not do well when the seed is first brought from a climate radically different, but the few ears that do ripen will mature an increased harvest the second year, and so on until the varieties are so acclimated as to harvest bumper crops. The notion is worth while trying out on a small scale with other products than corn.

Use of Forest Leaves

Editor of Green's Fruit Grower:—The fallen leaves of the forest have some good qualities which the farmer does not always appreciate. They have an agreeable smell, absorb unpleasant moisture, and during the winter are converted into fertilizing agents. They may be gathered expeditiously with a hand-rake and carted to the stable or barn-yard. They make excellent coverings for semi-hardy plants, as they do not conduct moisture which might freeze. They serve as a protection against frosts. A friend of mine turns his land in November, filling each furrow with leaves, which are covered as the next furrow is run. He says that by this process the land is made much more productive.—Frank Monroe Beverly, Va.

Thanksgiving Prayer

Cora M. W. Greenleaf in The Iowa Farmer
Fill thou my heart with gratitude to-day
For every friendly word and kindly smile
And e'en the smallest blessing 'long the way
That cheers my saddened heart a little while.

I thank thee, Lord, that grief can't always last;
That there's an end to sorrow's darkest day.
Then give me gratitude for pleasure past,
My joys that you sawest fit to take away.

For all my cruel sorrow and mistakes
I humbly offer thanks to thee to-day.
If thus I've learned to soothe a heart that aches
Or turn some wanderer's feet back to the way.

All About Dirty House Cellars

A friend whose business requires him to enter the cellars of a thousand or more of the citizens of the city of Rochester, N. Y., whose office is to examine the gas meters, tells me that while these houses have a fine outward appearance from the street the cellars are almost invariably a disgrace to civilization. He finds these cellars filled with old barrels, boxes, waste paper, cobwebs, dust, empty boxes, empty fruit cans, and waste rubbish of various kinds, including wagonloads of ashes, all intermingled or left in general disorder.

I do not doubt that there are many readers of Green's Fruit Grower whose

cellars are not always in condition to be proud of. I confess that such may sometimes be the case with my own cellar, and yet I aim to have this cellar cleared of rubbish and put in order at least once a month. On such clearing-up occasions my men often find accumulated nearly a wagonload of wastematerial, empty boxes, barrels, ashes and other items such as I have mentioned. These men carry off the articles not needed, simply placed in the cellar for storage, brush down the cobwebs, sweep out the floors, carry out the ashes, clean out the furnace, all of which, since I have several cellars under my house, occupies the better part of two hours.

It is important that the house cellars should be examined often, cleaned up and put in order. We breathe the air of the cellars. We cannot avoid this, for the air from the cellar is constantly rising into the rooms above. For this reason it is as necessary to keep the cellars as clean as the rooms above. When warm weather comes in the spring the cellar windows should be opened and left open during the summer months. The cellars should be ventilated during the winter. Do not forget that the cellar is an important part of the house.—C. A. Green.

GREEN'S FRUIT GROWER

The Oldest Fruit Journal in America

ADVERTISING RATES

Display Advertising per agate line . . . \$.60	Half Page each insertion . . . \$210.00
One inch each insertion . . . 8.40	Full Page each insertion . . . 325.00
Quarter Page each insertion . . . 105.00	Classified Rate per word . . . 10c

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No discounts of any kind to advertisers or agencies on Classified advertising.

All bills are due in advance each month on day of closing forms. Eight words average a line; fourteen lines to an inch.

Display advertisements of less than five lines, and reading matter advertisements, are not accepted.

When the advertiser is unknown to us, proper references must accompany the order.

Copy and plates must be received at Rochester 26 days before date of publication if proofs are desired before insertion.

Last forms close the 20th of preceeding month.

Send for complete rate card and important data.

GREEN'S FRUIT GROWER COMPANY
ADVERTISING DEPARTMENT
ROCHESTER, N. Y.

Start NOW Green's Fruit Grower Readers Can Easily Make \$25 Per Week At Home



READ WHAT THIS WOMAN DOES

"Made over 11,000 yards of carpet on my loom in spare time the past three years," writes Mrs. Sadie E. Taggart, West Plains, Mo. "I never weave a day that I don't make 20 yards and I do my own housework. I weigh only 115 pounds—don't tire of weaving. Loom as good an investment as an 80-acre farm."

For over six years I have been advertising in Green's Fruit Grower. Scores of Green's Fruit Grower Folks are earning good money with Newcomb Looms. I want all Green's Fruit Grower readers to know how you can make your time most profitable—how you can engage in a delightful and fascinating occupation in your own home, that will not interfere with your other duties, and assure you big profits for as much or as little time as you may be able to devote to it. I promise that you'll be interested. I say, and I know that every word I say is true, that you can make more money and make it more easily by weaving on a Newcomb Automatic Loom than at any other kind of home employment. My 20 years' experience with others and their letters prove what you can do.

THE NEWCOMB AUTOMATIC LOOM
is made especially for home workers. Unlike any other loom, it practically works itself. A simple movement of the hand is all it requires of the operator. No treading—no stooping—no shuttle throwing. Just the easy work that thousands of old and young are making big money at today—at home.

No experience is necessary. You will be delighted with the ease with which you can make the finest and most durable carpets, rugs, mats, draperies of every kind, and even beautiful portieres, chenille curtains and hammocks.

Bear in mind also, that no cash outlay for supplies is required. Old carpets, sacks, cast-off clothing and rags all furnish material for the loom. And the results you get with such material are simply wonderful. You can be sure when you own a Newcomb, that you will have more than enough work to keep you busy. Many of our customers make from \$25 to \$30 a week, weaving with the Newcomb, and you can do likewise.

Do not neglect this opportunity. Write me today for my free catalog, "Weaving Wisdom," which tells all about our looms and the extremely reasonable prices on which Green's Fruit Grower Folks can obtain one of them.

W. B. STARK, Sec'y, NEWCOMB LOOM CO.



W. B. STARK
who will help you start a money-making business.
NO EXPERIENCE NECESSARY
Let me send you some samples of the work you can do on a Newcomb Loom. The more you need the money the more I can and will help you to get started to making it.
20 Taylor St., Davenport, Iowa

Millions of Apples from Western New York Will Be Sold in West and Middle West.

Twenty-two million four hundred thousand is the figure.

No, not bullets used in the European war, but apples that will have been shipped to the West and Middle West from Western New York before the 1914 shipping season is over. That estimate was made yesterday by Seth J. T. Bush, manager of the Eastern Fruit and Produce Exchange, which probably will ship a good many of the twenty-two million apples.

This figure, according to Mr. Bush, is larger than ever before because a new State law compels Western New York growers to pay more attention to sorting and packing their apples. It has long been known to apple men and to apple consumers that the Western New York apple has no peer in the world for flavor. The Westerners, realizing the futility of attempting to compete in flavor, began to improve the outward appearance of their product and their packing methods.

HOW WESTERNERS WON TRADE.

The result was that in a few years the Westerners began to make great inroads into the foreign and domestic markets that had hitherto demanded Western New York apples almost exclusively. Western New York growers began to see the reason, and for two or three years there has been agitation for improved packing methods in the East. The result is, according to Mr. Bush, that lost trade is turning back to Western New York.

Apple Day was of great significance in Rochester and its vicinity this year, and the business men and apple growers made plans to celebrate it worthily.

"Easterners and Westerners have until recently been fully justified in rejecting Eastern apples," said Mr. Bush, "but the new law compels New York State growers to pack barrels with fruit of a uniform grade, so that buyers know just what they are buying. The trouble heretofore has been that every one felt reasonably certain of not finding bad apples fit for nothing but pig feed carefully hidden away beneath the attractive fruit that was carefully laid out on top of the Eastern barrel. The new law has corrected these conditions, since it requires growers to indicate on each barrel over their names whether or not the contents are scabby, wormy, diseased, rotten or fungous."

It will require 4,000 freight cars to take the Western New York apples to the West this year. The opportunity to sell Eastern apples in the West is particularly good, according to Mr. Bush, since Western growers complain much this year of worms and diseases in their fruit.



TELL TOMORROW'S WEATHER
White's Weather Prophet forecasts the weather 8 to 24 hours in advance. Not a toy but a scientifically constructed instrument working automatically. Handsome, reliable and everlasting.

An Ideal Xmas Gift
Made doubly interesting by the little figures of Hansel and Gretel and the Witch, who come in and out to tell you what the weather will be.

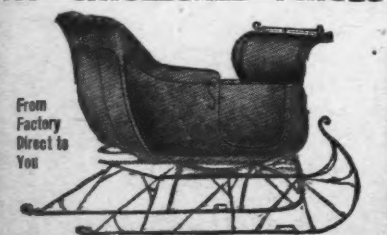
Size 6 1/2 x 7 1/2; fully guaranteed. Sent postpaid to any address in U. S. or Canada on receipt of \$1.00. Agents wanted.

DAVID WHITE, Dept. 14, 415 E. Water St., Milwaukee, Wis.

"Barrel Making Simplified" The only book published on simplicity of barrel making. Price \$1.00 per copy. Descriptive booklet free. LEON MILLER, 1903 W. Germantown Ave., Philadelphia, Pa.

"HERB CUTTERS" Doctor Recipe Book describes herbs for all diseases, worth \$5 only 10 cents. Ind. Herb Gardens, Box 56, Hammond, Ind.

CUTTERS AT WHOLESALE PRICES



Write for our special offer on all Cutters ordered early. You can save from \$10.00 to \$20.00 in buying from us.

Kalamazoo Carriage & Harness Co.
Dept. G.F., Kalamazoo, Mich.

Grounds and Flower Border

Written for Green's Fruit Grower by F. H. SWEET

Top dress the drives with cracked stone and repair the gutters on each side. Thin hot tar poured over the cobbles will hold them in place during the winter weather.

Transplant the spring-sown perennials to their permanent places where they are to flower next year. Dig the bed deep, mix plenty of rotted manure with the soil and set the plants far enough apart to afford their full development.

After dahlias have been killed by the frost, cut off the tops six inches above the ground, and a week later dig up the tubers. Let stand in the sun for two or three days to dry, then shake off the earth, and store away in a dry, cool location.

Dig up the gladioli corms after frost, clean them off and dry for a day in the sun. Store in a cool, dark place in shallow trays.

Rake up the leaves and preserve them under cover for mulching purposes.

When the frost kills the cannas, cut off the tops just above the ground. Leave the tubers in the soil for a few weeks to

the freezing dry of the roots of your trees and shrubs.

Sheep and Swine in Orchards

Written for Green's Fruit Grower

Many apple orchards in the hill sections are in locations rough and rocky and unsuited to tillage, and in all such cases undoubtedly sheep or swine are the best renovators, improving the orchard and at the same time growing a healthy marketable body for sale later by their owner.

In this section many claim they cannot keep sheep on account of the dogs, (which I very much doubt), but this problem we will leave at this time.

Hogs pastured in the orchard with a large run will do much good and if pasture is not over-crowded, say not over half dozen to the acre perhaps, they will find plenty to root and will not disturb trees. In autumn they will pick up all windfall fruit and prevent insects from otherwise escaping; they will turn over enough sod to prevent growth of grass or



Black Walnut tree, Rose of Sharon, Hardy Hydrangea, Gladiolia and Phlox at Green's Fruit Farm.

ripen. If the weather becomes very cold, draw some soil over them. After digging, clean off the earth and set in the sun during the day, for at least a week, protecting well at night. Store in a dry, cool, frost-proof room.

LEAVES WELL WORTH SAVING

There is hardly a better mulching material than the leaves of our trees and shrubs, and no better soil can be found in our woods and forests than where the leaves have fallen and decayed.

The soil, called leaf mold, is one of the best soils for your potted plants, especially for your ferns, and is listed in florists' catalogs at a dollar a bushel. It is usually mixed with about one-half part of good garden loam and a little sand, and gives not only a rich soil in humus and plant food, but also a potting soil which is porous, light, retains moisture well, and will not crack or bake, especially valuable for plants with many fibrous roots and for seedlings.

Leaves also form an excellent material around your trees and shrubs and hardy borders, as they retain the moisture, prevent the soil from cracking open, and

weeds to sap the trees.

Nevertheless, I have known hogs in close confinement in an orchard to ruin the trees, by rooting so deeply around them as to destroy all small fibrous roots and in some cases I have known hogs after the soil was all worked over, to strip the bark off the tree trunks.

In other cases they have undermined stone walls when closely confined alongside them and have made unnecessary work in repairs.

I would not advocate turning hogs into a young orchard with trees smaller than 3 or 4 inches in diameter, as small trees are sometime damaged by the hogs using them as a rubbing post.—E. C. W., Hiram, Maine.

Keep Silence

One topic is peremptorily forbidden to all rational mortals, namely, their distempers. If you have not slept, if you have the headache or leprosy or a thunderstroke, I beseech you by all the angels to hold your peace and not pollute the morning. Come into the asure and love the day.—Ralph Waldo Emerson.

Classified Advertisements

No display advertising will be placed in this department and no type larger than 8-point. The first three words only to be printed in capital letters. Each abbreviation and number will count as one word. Rate 10 cents per word for each insertion. No advertisement inserted for less than \$1 per issue. We cannot afford to do any bookkeeping at this rate. Cash must accompany every order. Orders must reach us not later than the 15th of the month previous to the month in which the advertisement is to appear.

Terms: CASH WITH ORDER.

Green's Fruit Grower Co., Rochester, N. Y.

HELP WANTED

MEN AND WOMEN over 18 wanted. \$65.00 to \$150 month. U. S. Government life jobs. Common education. Write immediately for list of positions open to you. Franklin Institute, Dept. M-147, Rochester, N. Y.

WE WILL PAY you \$120.00 to distribute religious literature in your community. Sixty days' work. Experience not required. Man or woman. Opportunity for promotion. Spare time may be used. International Bible Press, 227 Winston Building, Philadelphia.

FREE ILLUSTRATED BOOK tells of about 300,000 protected positions in U. S. service. Thousands of vacancies every year. There is a big chance here for you, sure and generous pay, lifetime employment. Just ask for booklet S. 1146. No obligation. Earl Hopkins, Washington, D. C.

MALE HELP WANTED

MEN WITH PATENTABLE IDEAS write Randolph & Co., Patent Solicitors, Dept. 220, Washington, D. C.

WANTED—Young man whose main characteristics are grit and determination to get out of treadmill methods; raised on a farm preferred; knowledge of Silos and Silage feeding desirable. Job is permanent to man who is steadfast. Give age, nationality of self and parents; if married, size of family; occupation for past three years, and with whom. Address Tile Silo Co., Kalamazoo, Mich.

FARMS WANTED

WANTED to hear from owner of good farm or unimproved land for sale. Send description. Northwestern Business Agency, Minneapolis, Minn.

FARMS WANTED. We have direct buyers. Don't pay commissions. Write describing property, naming lowest price. We help buyers locate desirable property free. American Investment Association, 32 Palace Bldg., Minneapolis, Minn.

FOR SALE

DUROC PIGS, PED. \$16 pair. Write S. A. Weeks, De Graff, O.

WATER SUPPLY BOOKLET free; Harrisburg Hydraulic Ram Co., Harrisburg, Pa.

MILCH GOATS—Write George Wickersham, 2914 East Central, Wichita, Kansas.

GIANT HIMALAYA BLACKBERRY, dozen 60 cents; hundred \$4. Willard Brower, Grafton, Ill.

FOR SALE high class hunting, sporting, watch and pet dogs; such as setters, pointers, spaniels, coon, deer, wolf, bear, cat, rabbit and foxhounds; ferrets, rabbits, guinea pigs; swine, sheep; young stock a specialty. 12c for handsome catalogue, all breeds; price list poultry and pigeons. S. V. Kennels, Funkhannock, Pa.

FULL BARREL LOTS of slightly damaged Bristol Stoneware shipped any address direct from pottery, New Brighton, Pa., for \$1. Lots are well assorted, household articles containing crocks, jars, pans, bowls, pitchers, tea and bean pots, a little of each. Send cash with order. Write us. E. Swamy & Co., Portland, Maine.

FARMS FOR SALE

EXCELLENT FRUIT and truck garden lands in Eau Claire County, Wisconsin. Wild lands fifteen to twenty dollars per acre; orchards fifty years old in vicinity; telephone and mail service. Ask for Fruit Book No. 9. Land Department, Soc. Ry., Minneapolis, Minn.

REAL ESTATE FOR SALE

SELL YOUR PROPERTY quickly for cash, no matter where located, particulars free. Real Estate Salesman Co., Dept. 22, Lincoln, Neb.

GOOD BUSINESS AND STOCK for sale cheap; no other nursery near. Will sell or lease real estate. Not much capital required, but room for extending. King-Thurman Nursery, Kalispell, Mont.

COLD STORAGE

COLD STORAGE for fruit. The Cooper Brine System using ice and salt. Superior results over other methods. Reasonable cost and safety. Madison-Cooper Co., Calcium, N. Y.

MISCELLANEOUS

CHICKS—Why not send for free booklet? Tell you all about raising chicks and winter eggs. Old Honesty Heater Co., Dept. G., New Washington, O.

AGENTS WANTED

SALESMEN—EARN \$2000 TO \$4000 a year. New combination, 12 tools in one. Sells at sight to contractors, farmers, teamsters, fence builders, threshers, miners. Weighs 24 pounds, lifts 3 tons. Stretches wire, pulls posts, hoists, etc. Chance for men who want honest money making proposition. Harrah Manufacturing Co., Box M, Bloomfield, Ind.

Letters From The People

"Prudent questioning is the
half of knowledge."—Proverb

A Freak Tree

Editor of Green's Fruit Grower:—I want to tell your readers of a freak tree that I have in my garden. Some years ago I bought of a nurseryman two Burbank plum trees. These trees I carefully planted and they grew apace. At the end of two years one of them died. I broke the dead tree off even with the ground, and had almost forgotten it, when one day as I was walking in my garden I noticed five or six sprouts growing from the stump where the plum tree had been broken off. I broke off all but two, and let them grow to see what they would make. Now I have the two trees growing from the same stump, both over eight feet high. One is bearing plums and the other is bearing peaches. The foliage, too, is that of a peach and a plum.—Mrs. Frank Houf, Mo.

Monument to Johnny Applesed

Editor of Green's Fruit Grower:—I am interested in the story of the Pioneer Fruit Grower of America, Johnny Applesed. There is a monument erected in a park at Mansfield, Ohio, in honor of Johnny Applesed, beside an apple tree which he planted on his trips through the country. Both are enclosed by a fence. His real name, which, if I remember correctly, was John Chapman, is engraved on the monument, also his history. Many of the old people in Mansfield could remember him and often spoke of him. Perhaps there is a record of the erection of the monument, which would be interesting to many. Probably the Mayor of Mansfield could give you further information.—Mrs. Grace Putnam, Mich.

How to Kill Woodchucks

Mr. Lyman E. Bigelow tells the readers of Green's Fruit Grower how he killed woodchucks, when a boy, on the farm:

Take a piece of paper and wind over the finger, making a tunnel-shape, double the tip end up; so as to stop the outlet; put a piece of fuse about 12 inches long, one end down to the bottom of the tunnel; put not more than one-half teaspoonful of powder in this tunnel, then tie a string about it so as to hold it together.

Be sure there is but one hole in the ground; cut a piece of sod to cover the hole, light the fuse, crowd it down as far as you can in the burrow, clap the piece of sod over the hole, hoe some fine dirt on top and tread it down firmly; by the time this is done the powder will flash and, there being no air for the woodchuck to breathe, he will die. If the work is properly done the woodchuck will never dig out.

Michigan as a Fruit Growing State

W. D. McBride, of Michigan, calls attention to Michigan as one of the great fruit producing and farming states. He is of the opinion that Michigan has not received the attention and praise which it should have received owing to its marvelous products. While some of the soil is light and sandy, he says he can show some of the best orchards in the world growing on this sandy soil. 75% of Michigan farms are sandy and 40% are light sand. He says 65% of the apples and grapes are grown on light sandy soil in Michigan.

There are many arguments in favor of sandy soils. They are more easily cultivated with less wear and tear on men, horses and tools, and in many instances they do not dry out so readily as some clayey soils. The experience of C. A. Green with sandy soils is that they need more constant fertilizing, either by barnyard manures or commercial fertilizers, than do clayey soils. There are all kinds of sandy lands. Some sandy soils blow about in the wind, and this is objectionable, but can be counteracted. Some sandy soils have clayey subsoils, which are desirable. C. A. Green's ideal farm is one that has upon it both sandy soil and clayey soil. For small fruits he prefers a sandy loam, and yet he has

grown small fruits with great success on clayey loams.

Did Not Die After All

Editor of Green's Fruit Grower:—I am a boy past 84 years of age, living all alone on fruits and garden vegetables. I neither eat meat nor butter. I have a good garden all from my own work. I had a few strawberries, lots of onions, 500 quarts of currants, 11 bushels of cherries, 3 bushels of gooseberries, some plums, and more apples than I can use of early and late ones, also some pears. My berry bushes froze, but I have set more. I may live to want the fruit, but if not, hope it will do some one good. My potatoes look fine. I also had 140 sheaves of oats.

My wife died last winter, so I live alone on the little plot of 1½ acres of land. If you think this letter of interest you may put it in the Fruit Grower.

I hold that "as a man thinks so is he." So many people give up at the age of 60 or 70. That is the time I began to live! I began to think for myself when 15, when three physicians said I had better make my will for I had consumption. They are long gone, and I am healthy and strong, can go to town with whatever I can spare of fruit or garden truck.—J. H. Hadsell, N. Y.

About Boston Fruit

Editor Green's Fruit Grower:—Born and raised on a fruit farm, eight miles from Boston, I think I know something of the varieties of apples and pears demanded by the city. Of the apples, the first to get ripe are the Yellow Transparent and the Red Astrachan. These kinds are good sellers, but the Transparent bruises very easily and the Red Astrachan is apt to rot on the blow end. However, there is good profit in them. Then comes the Early Williams. This is a good apple, of the right color and sells easily. It is apt to scorch if left too long exposed in the sun. It is a fine apple "for a' that." The Duchess of Oldenburg gets ripe about this time. There is always a demand for this apple, though it is a little mealy.

Then comes the Gravenstein. I think you in New York do not give this apple as much importance as it deserves. It is the leading fall apple in Boston. I see hundreds and some days thousands of bushels of them on teams direct from the farms. It begins to come in the last of July and ends in October. It drops off when colored, and many of the farmers never pick this variety, but pick it up every day or two from the ground. The apples may bruise some, but they gain in color.

Then comes the McIntosh. This apple has gained favor the last few years. Its flavor is delicious, and color bright red. It is undoubtedly the coming apple. It spotted a few years ago, but has improved lately. It ripens a little later than the Gravenstein, but sells fully as high. The Porter sells when good. The Snow apple sells fairly well. For winter, of course the Baldwin takes the lead. The Northern Spy is not raised extensively in this vicinity. This kind used to come very cloudy. The Hubbardston is not a good seller, neither is the Rhode Island Greening, the Greening on account of color, and the Hubbardston is not quite fancy enough for a table apple, nor sour enough for a pie apple. The Roxbury Russet is rapidly going out of favor by reason of the Baldwin being kept in cold storage. There is very little demand for a sweet apple. The Ben Davis is not popular. These are the principal kinds here.

I believe the early kinds of summer and fall apples are going to pay better here than the later ones that come into competition with the western fruit. I wouldn't set out a Baldwin, Hubbardston, Russet or Greening. We keep our windfalls picked up and so are not troubled with the codling moth. Have sold Baldwins in August, that is, from the ground.

We have numerous pests, however, the gypsy moth, brown tail, tent caterpillar, canker worm, San Jose scale and others.

Everything here is sold in the open bushel box. We live within teaming distance of Boston and sell our fruit to the fruit dealer or whoever pays the most. If living farther away and depending on the railroads and commission men, perhaps other varieties would pay better.

We do considerably in pears. The Clapp's Favorite is the first in market.

It often sells well at first. Then comes the Bartlett. This pear is raised quite extensively around here, but comes into competition with the California product. The Seckel is a good seller when large. The Sheldon, to my mind, is a fine pear, but does not sell as high as it should. There is the Buffum, which is mealy but looks well. The Anjou is a good pear, but spots badly. Now we come to the Beurre de Bosc. This pear for years has sold for nearly twice as much as any other variety. You give it very little consideration in your paper. Last year it sold for \$3.00 per bushel, wholesale, while Bartlett, Anjou and Sheldon sold for \$1.25. Possibly an extra large Seckel would sell for as much, but it would have to be fancy. These were average prices. We team our pears the same way as apples. I believe we have a better chance for pears than apples in this locality, in the near future.—John W. Paul, Mass.

What November Means

The month of November gets its name from the Latin word for Nine, "Novem," being originally the ninth month.

But like several of the months which bring the yearly calendar to a close, the meaning is overlooked in the arrangement made when January and February were

added to the months. It is known as the month of "leaf-fall," the "wind month," and also as the "blotmonath" or sacrifice month or slaughter month because of the usual custom of supplying the winter's supply of meats during this month. This month has long been the month for the annual Thanksgiving services, but the first national Thanksgiving for peace was celebrated on the 2nd of November, 1865. The month might very well be called the "reunion month," since it is during its waning days that the family circles unite in the annual Thanksgiving dinner, relic of that feast of the Pilgrims during their first year of heartaches and discouragements.

Plowing Sod

In the northern regions it pays to plow sod land in the fall, if such land is to be used for very early spring crops, such as early cabbage and early potatoes. The vegetable matter is more perfectly decayed when the land is plowed in the fall, and, if the ground is harrowed as soon as it is dry enough in the spring, there will be a maximum amount of moisture available for the growing crops. Again some plowing done in the fall will be greatly appreciated when the rush of the spring work comes on.



This Rock Crusher Does Double Duty

WHEELING LIME STONE CRUSHER



Crushes fine for liming land or coarse for road and concrete work. A simple wrench adjustment changes size of product. No other crusher has this advantage. Don't buy a big expensive outfit unless you need it. Our No. 2 enables you to add capacity any time — another exclusive Wheeling advantage. Why pay for capacity you don't use? Prices 15% less than last year due to increased demand and standardization of parts. Look into this and save money.

The Wheeling is built like a battleship — of steel — three times stronger than cast iron and lighter. Your engine will run it. Made in 7 sizes for every crushing need by the pioneer manufacturers.

WHEELING MOLD & FOUNDRY CO., 603 Raymond Street, WHEELING, W. VA.

Will more than pay for itself first season crushing for you and neighbors and you'll double crops in the bargain. Ask for full particulars of crushing profits and

Write for This Book
"Mixing Brains with Farming" — packed with valuable facts for farmers. Free on request.

Christmas is Coming

GET READY NOW



Why not get ready for it now? If you will make some friend a present of a year's subscription to Green's Fruit Grower we will send you a holly box of forty-eight beautiful Christmas cards and will supplement your present to your friend by sending a box of these beautiful Christmas cards, all charges prepaid, to your friend.

Send us only fifty cents, give us the name

and address of your friend and your own name and address. We will send Green's Fruit Grower to your friend for a whole year with a box of Christmas cards. We will also send you a box of the same beautiful cards charges prepaid to your own address.

Green's Fruit Grower

5 WALL STREET,

ROCHESTER, N. Y.

The Apple as an Article of Diet

Written for Green's Fruit Grower by
J. S. Underwood

"He who eats an apple before going to bed robs the doctor of his daily bread" is an old saying and I doubt not a true one. In this country where apples are so plentiful, and choice ones, too, they should be one of the staples on our tables. They should be served every day in some form, cooked, baked, fried, eaten raw or stewed with the skins on. The best flavor is next the skin.

A Norse myth says the gods and goddesses courted perpetual youth by eating the apples provided by one of their number.

The Romans crowned Pomona goddess of fruit trees and gardens, picturing her seated on a basket of flowers, holding a bough and apples in her hands. The high esteem in which the apples were held by the ancients is worthy of our imitation, for they are not only pleasant food and nutritious, but have valuable alternative properties and correct acidities in the system. The malic acid in the apple is a great regulator of the proteids eaten, so that they do not clog the system, hence the value of eating apples in the winter season.

So great is the food value of apples that they may be used to replace a portion of the meat usually consumed. This alone, in view of the extremely high price of meat, should bring the apple to the front. Apples are a tonic to the brain and spur

support my family if such is possible, and I believe you are in a position to advise most correctly the cultivation necessary to obtain this. I will thank you greatly for a sketch based on your practical experience of just what I can do on the stated two acres.—J. P. Mann.

C. A. Green's Reply: You do not state whether you have had experience in fruit growing or whether you are entirely inexperienced. If you are inexperienced, you should secure the services of an experienced planter, one who not only knows how to plant but has some knowledge of soils and locations and how to improve the soil by ditching or enriching if it should be needed, or of preparing the soil for planting.

In answering such questions as this, I often refer to my own personal experience when, after having been born and brought up on a farm and having spent fifteen years in city business, I left the city for farm life. As I needed revenue at the earliest possible moment, I planted the first year an assortment of small fruits about as follows: One-fourth acre of strawberries, one-tenth acre of red raspberries, one-tenth acre of blackberries, 100 early ripening varieties of grape, 50 peach trees, 50 apple trees, 25 pear trees, 25 quinces, 25 cherry trees.

I cannot do better than to advise you to divide your planting up something as suggested above. It will be some time



Apple picking at Green's Fruit Farm near Rochester, N. Y.

it on, because no other fruit contains such a large proportion of phosphorus, which is the mainspring of the brain and spinal cord, so that the apple is one of the best foods for those of active mental life and sedentary occupation.

In my student days I used to eat six or seven baked apples during my evening study. They were put on a granite pie plate and placed in a slow oven during some part of the day and baked. They are easily digested, satisfying and are a good nightcap.

Encourage the children to eat apples. Eat them yourself. Eat all you can—raw, dried, baked, stewed and fried—only eat! No fruit, I think, is so good as apples and they are easily obtained. Where one does not have apples of his own raising, he should encourage his children to spend their pennies for apples rather than candy. Apples are one of the best and most reliable cosmetics on the market. A liberal daily supply of this fruit will give to most people a good complexion.

Advice About Planting Two Acres to Fruit.

Mr. Chas. A. Green:—I would like to ask your advice as to the possibilities of a plot of about two acres. First I will give you an idea of my object in planting an orchard. I have reached the age of 50 years and have a family of five, self included, and as the time is drawing near when I will have to retire from business life, it is my object to build up a small country residence, something that will yield the greatest profit possible, even

before your apple and pear trees come into bearing. Strawberries will come into bearing first, followed by the raspberry, blackberry, grapes. The peach trees will bear sooner than the other fruit trees.

If your land is in sod now, it should be plowed at once preparatory to planting next spring. If the soil has been cultivated and it is not in sod, it may be planted this fall, with the exception of strawberry plants, which I should defer planting until spring. Sod land intended to be planted next spring should have been plowed early this season and planted to some cultivated crop so as to clear it of weeds and grass.

If your children are old enough to be helpful in picking fruit, you might be induced to plant more largely of the small fruits, but this depends somewhat on what class of fruit is most salable in your locality. If you are living in a populous district with nearby city and villages, there will probably be a good demand for small fruits as well as large fruits. It is poor economy to plant fruits, particularly small fruits, on land that is not thoroughly prepared before planting. I mean by this that the grass and weeds should be subdued, but weeds can usually be subdued by frequent cultivation and hoeing.

TESTIMONIAL

Vineland, Ont., July 29, 1914.

Mr. C. A. Green:—We appreciate and value your fruit magazine very highly and only wish we had a farm so as to be able to put into practice more of what we read in your paper.

Mrs. Joshua Houser.

FREE TRIAL 30 DAYS BESSEMER NON KEROSENE CRANKING ENGINE

"The Masterpiece of the Largest Manufacturers of 2-Cycle Engines in the World"

"Pay for itself in fuel saved!" That is the proud achievement of the Bessemer Kerosene Engine—and that's what interests you! Built to give years of steady service on the lowest operating cost, that's why the Bessemer is displacing other types of engines everywhere. Non-cranking, simple, only three moving parts—a boy or woman can run it. Thousands of Bessemer Kerosene Engines are giving daily service on farms all over the world. \$10 to \$100. 30 days free trial. Immediate shipment. Write for Catalog "Q" free.

Bessemer Fuel Oil Engine

Lower picture shows the famous Bessemer Fuel Oil Engine. Widely used in irrigation, flour mills, factories, electric light plants, etc. Runs on cheap fuel and crude oils. No batteries or magneto required. Ignition is automatic after starting. 15 to 100 H. P. Special Catalog "Q" free.

THE BESSEMER GAS ENGINE COMPANY

129 Lincoln Ave. Grove City, Pa.

Go South Sir

Purchase a Southern Farm

Look at the map of the United States. See how close to the big Eastern markets—by modern rapid transportation—are the states south of the Ohio and east of the Mississippi Rivers. Then consider

the climate—mild winters, pleasant summers, ample rainfall. The soil—suitable to all crops—corn, cotton, alfalfa, wheat, oats, potatoes, tobacco, fruits and garden truck. Then the price—

GOOD LAND AT \$15 AND UP AN ACRE

according to the improvements and location. Remember there are no cold winters—stock can graze on green pastures the year round, making production costs low. Expensive barns are unnecessary. Large local demand for farm products at profitable prices. *Industrial opportunities everywhere.* The Panama Canal will greatly benefit the South. Investigate this section of good roads, schools, churches and healthful climate where living is pleasant and profitable. Booklets on the States of Virginia, North and South Carolina, Georgia, Florida, Alabama, Mississippi, Tennessee and Kentucky. In which are you interested? Our magazine "The Southern Field" sent on request.

M. V. RICHARDS, Land and Industrial Agt.,
Room 44 SOUTHERN RAILWAY Washington, D.C.

Seasonable Supplies

The Handy Portable Sprayer

Is made for general use as a handy outfit about the garden, poultry house, stable and small orchard.

Tank made of heavy galvanized iron reinforced at top and bottom by steel bands, capacity 12½ gallons. Wheel and handles are made of wrought steel and braced, wheel 16 inches in diameter.

Pump No. 18 described below and is attached to tank by a clamp and held in place by thumb screw.

Price complete including mechanical agitator, 15 ft. hose and nozzle, 2-4 ft. extension pipes.

\$14.98

Green's Cog Gear Barrel Spray Pump No. 18

For small orchards.—The best pump on earth for the price.

It has bronze ball valves and brass seats; the plunger is brass fitted with hemp packing. Will handle hot, cold or any caustic mixture. The cylinder and discharge pipe are all brass. The air chamber is 32 inches in length, enabling the pump to throw a uniform, constant and elastic spray. It has good leverage, is very powerful and easily operated. The Mechanical Agitator stirs the solution from the bottom, making it impossible for this pump to clog under any circumstances. This pump can be used on any barrel.

Price as illustrated, including mechanical agitator, 15 ft. hose and nozzle, ready for use **\$8.80**

Standard Tree Pruner

With Metal Brace Plate, Anti-Rust Rod, Steel Lever. Standing on the ground the operator can cut from distance of arm's length to a height of 18 feet, according to the length of pole, the smallest twig or a branch an inch in diameter. Most convenient to use. Sure to do its work well.

Price—Length	4 ft.,	weight	3½ lbs.,	\$	75
"	6 "	"	4 "	"	85
"	8 "	"	4½ "	"	95
"	10 "	"	5 "	"	1.00

"Fruit Growers' Favorite" Pruning Saw

has a self-feeding draw cut blade with a thin back that will not pinch or bind. It will cut limbs closer to the tree and will do three times the amount of work in a given time than any other saw. Much of the work is done while standing on the ground, the handles being from 6 to 8 feet long. It is very light weight and a great labor saver. Price..... **\$1.50**

GREEN'S NURSERY CO.

Service Dept.

Rochester, N. Y.



ARE YOU GETTING
LOTS OF EGGS?

Or, do your hens lay only
when eggs are cheap?
Get the eggs this winter by starting to feed

CONKEY'S POULTRY TONIC

now. It doesn't force the hens but makes them want to lay because they are well nourished and strong.

Conkey's Poultry Tonic is an all round tonic that helps nature do its work—For this reason it is fine for every bird you own—your chicks, growing stock, molting fowls or laying hens.

Tell your Dealer you must have Conkey's—and write us if he cannot supply you. Remember, Money back if a Conkey Remedy or Tonic ever fails to satisfy you.

GET THIS BOOK—Learn to laugh at poultry diseases. It will make you an expert. Send 10c for a copy and we will enclose our Cash Value Coupon—something new.

THE G. E. CONKEY COMPANY
124 Conkey Bldg., Cleveland, O.



Crown Bone Cutter

FRED your hens cut green bone and get more eggs. With a Crown Bone Cutter you can cut up all scrap bones easily and quickly, and without any trouble, and have cut bone fresh every day for your poultry. Send at once for free catalogue. Wilson Bros., Box 234, Easton, Pa.



POULTRY PAPER

44-124 PAGE periodical, up-to-date; tells all you want to know about care and management of poultry for pleasure or profit. Four months for 10 cents. POULTRY ADVOCATE, Dept. 121, SYRACUSE, N. Y.

90

VAR'S All breeds Poultry, Eggs, Ferrets, Dogs, Pigeons, Hares, etc. List free. Colored Dog's 60 page book 10c. J. A. Bergay, Box J, Telford, Pa.



Barred Plymouth Rocks and Single Comb Brown Leghorns for Fall and Winter Shows

The best in quality at remarkably low figures.

Our S. C. Brown Leghorns have again distinguished themselves by winning at the Sept. Rochester Exposition show. 1st and 2nd cock, 1st and 2nd hen, 1st, 2nd and 3rd cockerel, 1st and 2nd pullet and 1st pen.

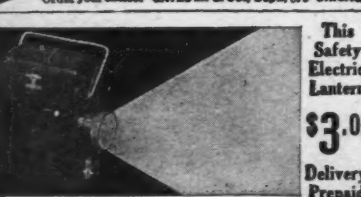
Our Barred Plymouth Rocks are of the same high show and utility standard as our Leghorns, having been line bred until they are the bluest of blue blooded stock.

We can furnish you birds for breeders and utility at
Males . . . \$5.00, \$7.50, \$10.00
Females . . . \$2.00, \$3.00, \$5.00
A limited number of cockerels only at \$3.00 each.
Show birds a matter of correspondence. Order direct from this ad to the farm of no regrets.

Green's Nursery Company
Poultry Department Rochester, N. Y.

FREE POWERFUL AIR GUN

Big lever action rifle free for selling 100 lbs. of Peat or 20 Art and Religious Pictures at 10c. Order your choice. GATES MFG. CO., Dept. 570 CHICAGO



This
Safety
Electric
Lantern

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Delivery
Prepaid

Is operated with two Standard Dry Batteries, which produce a clear, bright, white light for 100 hours, at a cost of 1-2c per hour. A simple switch turns it on and off. No fumes to fill, no wicks to trim. Absolutely no danger of fire or explosion. A safe and sane light to carry about the house, barn or stable. Equally handy for automobiles, deliverymen and rural travelers. Satisfaction guaranteed or money refunded. Agents coin money; write for terms.

Illuminating Electric Mfg. Co.
PHILADELPHIA, PA.

Poultry Dept.

Poultry Pointers

The day before shipping live fowls, feed hard grain.

If you do not grade your eggs some one else will and you will pay him for doing it.

After moulting, a little linseed meal is a fine thing to round out a good poultry ration.

Paint the buildings. They look attractive and the lumber will last twice as long.

Don't forget a box of fine, dry dust for winter use in the hen house.

Meat in some form must be fed poultry at least twice a week, also green food, if you want results.

Carefulness in dressing poultry pays for the extra pains taken. The pinfeathers must all be removed.

Egg production is not measured so much by the quantity as by the quality of the food.

The best fattening grains for turkeys are corn, wheat and oats. An occasional feed of barley is beneficial, although turkeys do not always take kindly to it.

It is surprising the number of different breeds of poultry one sees at a big poultry show. They each have their good points which recommended them to different people. The farmer should keep the breed that suits him best.

Have a light poultry house, admitting plenty of fresh air without producing direct drafts of air. The germs of most diseases cannot live in fresh air or very strong light.

Keep the windows in the poultry house clean. Rub them repeatedly with old newspapers. Sunshine in winter is the greatest of tonics.

Have from eight inches to a foot of leaves or straw on the chicken house floor, and feed whole grain in this litter. If straw is used it will be necessary to



The above poultry yard needs plum trees, fruit bushes and grape vines for shade. A few ducks and geese should be on every farm.

Well-managed poultry are preferable to farm crops in that poultry will produce an income at all times of the year.

Nothing makes a cooler, cleaner-looking poultry house than the use of plenty of whitewash.

The hens must be fed and fed liberally if one expects eggs in large quantities, especially winter eggs.

In most localities the building should face the south, as this insures the greatest amount of sunlight during the winter.

It will be money in your pocket to feed the pullets well so that they will grow fast and make strong, healthy birds for winter layers.

The turkey crop hatched previous to June 1st should attain good growth by the last of November, the cock birds reaching ten to twelve pounds.

Capons are the most profitable parts of the chicken business, just as steers are the most profitable part of the cattle industry.

Frequently disinfecting the hen houses, coops and drink and feed dishes is likely to save lots of trouble from disease.

The roosts should be built on the same level, 2 feet 6 inches from the floor, with a droppings board about eight inches below them.

Those hens that moult early in the season and get well feathered out by October or November can be counted as winter layers.

stir it up occasionally to prevent packing.

We have bright mild days in the fall that give us a chance to repair the old poultry house or build new lodgings. Be sure the sides of the house are in good repair and roof should be tight.

Some form of meat should be supplied the fowls daily. Now that the colder weather has set in, the bugs and other natural feeds of this character are becoming scarce, and we should supply animal matter to the fowls.

Sunshine is absolutely necessary for the health and vigor of the laying hen. Low windows should be set so that the sun will shine into every part of the house during some part of the day. Roosts should be placed on a level and not too high, as the hens are apt to injure themselves either by crowding, falling or flying against a projection about the house.

Farmers who raise wheat should keep a few green sheaves without threshing to throw to the chickens in the fall and winter for them to pick out the grain themselves. You will find that they will work at it like their lives depended upon it, and not only get good from the grain they secure, but the activity means health. Try and see.

Fowls, like animals, thrive best when given a variety of grains, and the following will be found a satisfactory mixture: Equal parts by weight, of corn, wheat and oats. When corn is difficult to ob-

tain, we have had splendid results by substituting barley.

Grit should be supplied to chickens at all times, as it aids digestion. Lime in some form must be supplied to the laying hen, to keep up her supply, which is so heavily drawn upon during egg-production. Grit can be purchased in commercial form, or coarse sand and small stones will do. Lime can be purchased in the form of oyster shells, though old plaster or dry cracked bones are fairly good.

From the Hen Yard

Written for Green's Fruit Grower by Earle W. Gage

Poor food means few eggs; ample food intelligently fed gives maximum results. Labor-saving devices increase the number of fowls one can handle and care for, but don't overlook the care, for no device nor deception can take its place.

Young poultrymen are anxious for early pullets; experienced men are not especially desirous of having the pullets lay before they are fully developed and practically matured, especially when the pullets are to be used as breeders, for by keeping up the force-feeding process for a few years, the size and vigor of the birds will be impaired and their usefulness be decreased. It is never desirous to have pullets lay too young.

Endeavor to give the stock as much of a variety in the line of feed as possible. The fowls will appreciate a change from corn to wheat, oats and sprouted grains. Wheat bran makes a desirable mixture for the mashers. Put whatever you wish into the mash and make up the balance with wheat bran. If this is fed wet, the bran may be mixed in such quantity that the whole will be a light crumbly mash. Never mix sloppy mashers any time of year.

Make preparation and calculation for the winter supply of green food now. Put in a few beets, cabbages, and make an oat sprouter odd hours. There is lots of green food now, but when snow flies there will be less, and egg production likewise without green rations.

GOVERNMENT ADVICE FOR POULTRY SHIPPERS.

Precautions that Will Avoid the Heavy Losses of Last Year's Disastrous Season.

The U. S. Department accompanies its words or warning with words of advice to the poultry dressers, telling them how to handle the birds to ensure high quality and a minimum change in composition.

First: The packer, as soon as the birds are received, should transfer them to "holding batteries," which are really coops so constructed that only a few birds are in the same compartment. All have an equal chance to get food, each has an abundance of fresh air, and absolute cleanliness is easily maintained.

Second: For 24 hours before killing, the bird is not fed, but is given plenty of clean water. In this way the crop is emptied and the flavor of the flesh is improved, as well as its keeping quality. The bird does not weigh as much when emptied of food, but it is better to be paid for a few less pounds of poultry than to receive only a freight bill.

Third: Killing should be done by cutting the veins of the neck from inside the mouth, while the bird is suspended by the feet.

Fourth: Holding the bird while removing the feathers is best accomplished by the "frame" method. The second best way is what is known as the "string" method, and the worst methods are the "bench" and "lap."

Fifth: After the birds are bled and picked, the animal heat must be removed.

Sixth: Pack the chilled birds in a standard box—12 to the box—or in small kegs if they are not to be hard frozen, and see that each bird in the package is an exact match in quality, size, color and perfection of dressing for every other bird. This is the height of the art of "grading."

Seventh: Have the refrigerator car in which the dry picked, dry packed poultry is to be shipped, iced with a mixture of broken ice and 10 or 15 per cent. of salt for 24 hours before loading.

Circulars 61, 64 and 70, Bureau of Chemistry, and Year-book article No. 501, all dealing with the handling of dressed poultry, will be sent on application to the Department of Agriculture as long as the supply for distribution lasts.

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Winter Eggs

When the flock of laying hens are provided with clean, roomy, and well ventilated quarters, there is no reason why every hen on the place will not lay an average of four dozen eggs before the spring opens and favorable weather begins. This is the one great source of income which might be profitably conducted by the average farmer during the cold months. Yet the time required need not be more than an hour to every hundred hens on the place. Each hundred hens should be made to lay four dozen eggs a day from the first or middle of December to the middle of March, when the output will increase with less labor.

When poultrymen and farmers realize that the sooner they follow Nature's plan and make the winter months as near like spring and summer months, the sooner they will realize the height of their ambition—winter eggs. It is all simple, this matter of getting winter eggs, if given a little thought and study. Using the gray matter in your skull will make you a successful poultryman.

Green Bone

Green bone can be fed advantageously to fowls intended for different purposes and kept under different conditions. It is a great help in hastening the growth of young birds, but the greatest help of this food to the average poultry raiser is in feeding it during the winter months to supply animal food. When fed to laying hens the yield will be increased wonderfully, and the poultry raiser will be well paid for the labor expended in cutting. It is a food which all fowls eat readily, and one that must be fed judiciously.

A Good Prospect for Poultry

The prospects for a profitable and successful season for poultrymen are very bright. The stringency in the money market, which we read about in the daily papers, was not as bad as some people anticipated and had very little effect on the poultry industry. It is a business that never has been overdone and there are no indications that it will be able to supply the demand for many years to come, as the tendency has been for increased prices for eggs and market poultry from year to year, and at the present writing the prices are fully as high as last season, if not higher. This means a good deal for the poultry raiser, as he is in a safe business that cannot be affected by "hard times." The breeder who has any surplus stock for sale, or intends offering eggs for hatching for sale, will enjoy one of the best seasons that they ever had, as more people are investigating the poultry business than when times are good, with the intention of taking up this line of work. The reason for this is that some have lost their situations on account of the curtailment of expenses of their employers, and they look to the poultry business as a safe, independent and profitable line of work to take up, under proper management.

WINTER POULTRY WORK

Preparing for the winter. Make your poultry houses warm and comfortable for the winter, overhaul them, see that no cracks are there to allow cold draughts to strike on the birds or the roosts, be sure that your roofs and north, east and west sides are perfectly tight, but allow for plenty of fresh air to come in the south side, which ought to be the farthest away from the roosting section; this will insure a dry house. Houses may be warm and comfortable and yet well ventilated; a stuffy, ill-ventilated house that smells when you open the door in the morning is not a healthy place for your birds; when this is the case give more ventilation without draughts. Use plenty of charcoal. Supply a good dust bath; coal ashes or road dust is suitable for this purpose. Clean out droppings often, every day if possible. Weed out the undesirable, cockerels, pullets and old hens that you do not need to produce the best results. Only keep the useful birds, giving them all the room possible. Winter eggs bring high prices and you only can get best results by keeping the most promising layers. If you want eggs you must feed for them. Supply a good litter and plenty of it.

On a farm near Colfax, Pa., 400 bushels of potatoes to the acre were harvested last season.

An October Visit to Green's Fruit Farm

Every year when the chestnut buds begin to open, when the grapes are ripe and winter apples have been beautified by a dozen different tints, and the autumn foliage is lending enchantment, I hie away to Green's Fruit Farm. Yesterday was one of those days of visitation. The fruit farm is a little over twelve miles southwest of the city of Rochester, N. Y. By automobile we make the trip in a little over half an hour.

I found the men in the cool cellars packing fall apples and pears in bushel boxes, getting them ready for shipment. As the method usually practiced in grading and boxing fruit is entirely revolutionized this year, some embarrassment occurs in deciding what apples belong to the fancy class, which apples belong to the New York State Standard A grade, how the box is to be branded, etc., of which we are keeping our readers posted.

There is a full crop of Kieffer, Anjou and Bartlett pears. Sheldon, Lawrence, Seckel and other scattering varieties are not so productive this year.

My great enjoyment came when I marched out to the specimen rows of apple trees planted, with the intention of testing various varieties so that we might learn the value of different varieties in our locality. I found many of the trees loaded down to the danger point with large and beautiful specimens.

I noticed that a few varieties were not bearing fruit. These varieties bear every other year, while other varieties bear every year. I found that many trees bore fruit on one side one year and on the other side of the tree the next year. I concluded that this condition has been brought about by the destruction of the fruit on the windy side of the tree by lack of pollenization owing to winds or storms, or the prevailing winds coming from the west destroying the crop of fruit on the west side of the tree, while that on the east side, being more protected, was preserved. It is a strange sight to see half of a tree filled with beautiful red apples while the other half of the tree is barren, but this is a happy condition where the fruit is used for family supply. I contend that no fruit pays such large profits as that grown for the family. Where the family has not a supply of raspberries, blackberries, grapes, apples, pears, etc., a bountiful supply is seldom provided from the market. Therefore the family which has a home supply of fruit, which yields the best profit of any crop planted, is the only family that is supplied with this healthful product.

Here are my notes of the different varieties as I passed through the specimen rows of apple trees, which embrace only from one to six of any one variety:

Gano, bright red, a seedling from Ben Davis, productive.

Banana, heavily laden with golden yellow fruit covered with a bright red blush. As I saw the Banana at our local fair it was a red apple, but this is unusual. Ordinarily speaking, Banana is a yellow apple.

Northwestern Greening, an abundant bearer of large, attractive fruit of ordinary quality. The tree is remarkably hardy.

Jonathan, heavily laden with fruit of medium size, bright red in color, handsome shape. I was surprised at the size and beauty of the Jonathans, for we do not consider it a great success in our orchard, though it is one of the greatest varieties in many of the Western orchards.

Gloria Mundi, a large whitish apple, an old variety bearing a heavy crop.

Shiawassee Beauty. This is a seedling of Fameuse, a hardy apple coming from Michigan, a late fall variety, keeping well up to January. This is one of my favorites as an eating apple, larger than Fameuse.

Ben Davis was bearing a heavy crop of beautiful red apples; a profitable market variety lacking in quality. Ben Davis apples grown upon these trees were picked up readily by the local grocers last spring at good prices.

King apple trees were heavily laden with large beautiful red fruit. It is an old standby.

The Melon apple tree was loaded with beautiful red apples of superior quality. It is a winter variety and a good keeper.

Fallowater shows productiveness but

is not quite brilliant enough in color though reddish. It is still in demand in many parts of the country.

Bietigheimer. This is an apple brought to this country from Russia, a hardy variety, bright reddish in color, very large, not of high quality.

Next to this was the Twenty Ounce, an old favorite, producing very large fruit, a fall apple, quite acid, always in demand in the market as a cooking apple.

Green Sweet is a conical shaped apple of green color, oily skin, of better quality than Tolman Sweet, one of the greatest bearers in the orchard, not widely known.

Maiden's Blush, an early fall apple, was ripe enough to eat out of hand. The apples were a deep golden yellow without much blush. This is becoming more popular.

No apple on the place exceeded in productiveness, beauty of color, and perfection or freedom from blemishes than the Hubbardston and the American Blush, growing side by side in the same row. Any one seeing these two varieties growing together would say that they are identical, and that the American Blush is simply the Hubbardston, but our foreman is certain they are two distinct varieties. He tells me that he has given Hubbardston and American Blush careful tests and finds that American Blush is of better quality and is a better keeper than Hubbardston.

There are over a hundred different kinds of apples in these specimen rows at Green's Fruit Farm. Cuttings are continually taken from these trees which causes the trees to be low-branching and somewhat dense. It is my opinion that this annual cutting off of the new growth from ends of the branches brings the trees into early bearing, and that the tendency is for the production of higher grade apples on trees thus cut back. But I do not think the effect of cutting back the new growth has so great an effect on apple trees in promoting productiveness as it has upon the pear tree, which is

marvelously affected by cutting off each year nearly all of the new growth of that season.

Our superintendent reported that the Kieffer pear trees on the place this year would produce a carload or more of fine fruit and that pickers would pick twice as many of these pears as they would of apples, and that the Kieffer pear, which sells at from \$2.00 to \$2.50 per bushel, pays better than apple growing. There are scarcely any culls among the Kieffer pears. Kieffer and Anjou pears produced the largest crop of any variety of pears this season at Green's Fruit Farm.

I must not omit mentioning the Tolman Sweet apple tree, heavily laden with fair and attractive fruit.

Blenheim, known as Blenheim Orange, sometimes called Lord Nelson, which has been in previous years an annual bearer of large and attractive fruit free from blemishes and of good quality, keeping up to January first, but ready for market in October, is bearing but a slight crop this year, which is well, for this is a season of plenty in apples.

Fameuse (Snow apple) is one of my favorites. When I planted my first orchard on this farm, I planted one tree of Fameuse. It did not grow so fast as Baldwin, but it has borne abundantly almost every year. I would not part with that tree for one hundred dollars.

The Southern Fruit Grower recently contained the following: Two years ago a reader told about a large apple grower at Kansas City, Mo., who boiled his apple juice down to a thick syrup, then barreled and shipped to the Chicago market. When the apple syrup arrived at its destination, enough water was added to the syrup to make it equivalent to its former bulk, and thus it was again converted into just plain old apple cider. In this manner, a great saving was made in freight rates.

Prof. H. C. Gore, chemist of the U. S. Department of Agriculture, has been in Hood River, Oregon, experimenting with condensed apple cider, and he is meeting with success. The apple syrup itself is a delicious product.



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for a sick chicken, yet one sick chicken in a flock generally means more sick chickens soon,—their diseases being mostly contagious or caused by the same food, drink or housing.

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Niagara Grain Fields Turned to Orchards

40,000 Acres of Orchards and 6,000 Acres of Vineyards in Niagara District, North of Niagara Falls

Written for Green's Fruit Grower by AUBREY FULLERTON



Here is a Niagara field recently occupied by ordinary farm crops which has been transformed into a vineyard. While this vineyard has a prosperous appearance I would not consider it an ideal place for growing the grape owing to the fact that grapes generally succeed best on hill slopes or hill tops, owing to better protection from early and late frosts. But it must be remembered that this vineyard is protected from frosts by its proximity to Lake Ontario.

A little more than thirty years ago the farmers in the Niagara Peninsula, just north of Niagara Falls, were growing grain on their lake front farms and wishing they could make more money. They did not know then that they were living in a country that was meant to be a fruit belt, and that the five-mile-wide strip which runs for fifty miles along the shore of Lake Ontario, at the foot of the sheltering Niagara escarpment, was potentially a garden. Some one began to experiment with fruit trees, and others followed: and to-day there are forty thousand acres of orchards and six thousand acres of vineyards in the district, which supplies most of the peaches, pears, plums, grapes and berries that the markets of central Canada call for.

Grape culture has been particularly successful. The grapes of southern France have been introduced and acclimatized, and in some cases improved by crossing with hardier native species. One hundred and fifty varieties of grapes are grown in the district, and some of them have won gold medals in competition with the vineyards of Europe.

When this land was under grain, thirty dollars an acre was considered a good crop return; since it has been made into gardens it yields two hundred dollars. The actual production of one farm of forty-five acres was as follows: 10,000 baskets of plums; 5,000 baskets of peaches; 1,000 baskets of pears; ten tons of grapes; and proportionate quantities of cherries, quinces and berries. The total crop realized seven thousand dollars. Another grower, who acted also as a local buying agent, shipped 5,600,000 pounds, or 280 full carloads, of the various fruits, the cash value of which was over \$96,000.

For the shipping and marketing of these immense fruit crops, a carefully organized business system has been devised. It is necessarily here as everywhere, a quick business. Orders are sent in by outside dealers, or are worked up by the shipper by telegraph or locally by telephone. Daily reports of market prices are given by wire, and return shipments are made by express. Railway connection



This photograph indicates that the fruit growers of Niagara district have learned the importance of drainage and that the successful vineyard or orchard cannot exist on soil that is not freed from surplus water. The fruit grower is shown in the act of opening up a ditch preparatory to placing the tile.

is given with points east and west, and from either end run two well-equipped electric roads through the heart of the

garden country. The express cars of two trunk railway systems are run over these electric roads and distributed as wanted. These cars have special refrigerator equipment and are dispatched to their destinations without re-handling of the fruit. During the shipping season an express service is given three times a day. Fruit may be on the trees at three or four o'clock in the afternoon, and at six the next morning it will be in Ottawa or Montreal, ready for the grocers' counters. One shipper loaded and dispatched eighty cars within eighteen hours.

There Are Two Niagara Fruit Districts

When American fruit growers read about the Niagara fruit district, they naturally think of Niagara county, which is famous for its orchards, vineyards and berry fields. This Niagara fruit district is on the southern shore of Lake Ontario, a short distance east of Niagara Falls.

There is another noted fruit district known as the Niagara fruit district which is situated in Canada not far from Niagara Falls, on the northern shore of Lake Ontario. It is this latter district in Canada which is illustrated on this page of Green's Fruit Grower. It is unfortunate that two famous fruit districts should bear the same name.

A Thanksgiving Prayer

"We thank thee for this place in which we dwell; for the love that unites us; for the peace accorded us this day; for the hope with which we expect the tomorrow; for the health, the work, the food and the bright skies that make our lives delightful; for our friends in all parts of the earth."—Robert Stevenson.



Here is a typical scene in the Niagara fruit district showing a village with orchards and farm lands, and Lake Ontario at the left. After glancing over this photograph the reader need not be told that this is a prosperous section of the country. No farm crop compares in profit yielding with fruit growing. As much net profit can often be made from a ten acre fruit plantation as from a farm of 100 or 200 acres.

Health Department

Health Notes

Cereals which contain the germ, such as rolled outer wrapping of the germ, such as oats, flax seed, etc., will by mechanical irritation relieve the condition of constipation.

To make beef tea, take any quantity of meat you wish and cut in half inch bits; put in a fruit jar or bottle with screw top; place jar in kettle of cold water, let come to a boil and boil for two or three hours—then use.

For nausea following a bilious attack when one suffers so from thirst and no liquid can be kept in the stomach, grape juice is a sovereign drink.

For a sore throat, one of the very best remedies is a cloth wet in cold water and laid on the affected part. This can be used also with a cold on the lungs, though the rest of the body should be protected from chill. It is said that a cold bath over the chest every morning, will greatly reduce the tendency to catch cold.

Drink Lots of Water

Apoplexy and cirrhosis of the liver are not pleasant fates, yet many American women live in such a manner that hardening of the arteries is almost unavoidable. This is due, not so much to a habit of wrong living, as to neglect of right living.

Perhaps the most general offense is failure to wash out the system by drinking water. Women habitually do not drink sufficient water upon an empty stomach. This neglect causes constipation, which is aggravated by the drinking of tea containing milk, a poisonous tannate, and by consumption of other harmful beverages, instead of pure water to quench thirst.

Every morning before breakfast you should drink two generous glassfuls of fresh water. It will not make you fat. But it will keep your pipes clean, give you a clear complexion, sweet breath and youthful appearance, and help to stave off hardening of the arteries.

When you get out of bed stretch every muscle. It is not necessary to exercise, just stretch. Stretching gives the arteries preparation for the day's work. Drink plenty of water between meals, also. Bathing and drinking water are the features of the big European "cures." All they do is to clean the blood pipes. You can do this just as well at home.

Fear, worry and anger are poisonous and destructive to the system. Why entertain them?

Sleep is the great benefactor of the human race. Going beyond your strength, working on your nerves, doing two days' work in one, is a splendid foundation for future ills.

Talking too much is a strength reducer. Worry is a "cat o' nine tails." It accomplishes its purpose by the cruellest route. Worry, and you pay the penalty.

Health.—John Burroughs, the famous naturalist, who is now 77 years old, says that the life insurance tables of the actuaries would be upset and an entirely new set of calculations would be necessary if everybody should live outdoors as he does. There is no reason why nearly every person should not have a long life and a merry one too. "My message is to watch the diet," he says, "take as much exercise and rest as possible and abstain from stimulants. Most old persons die of defective elimination, whereas if they would follow a few simple rules it would be the exception for a man to die before he was 75. I do more work in a year now than I could do thirty years ago. Every day I make it a point to spend at least one hour in a horizontal position. Lying down in the middle of the day or of the working period conserves

the energy of the heart to a degree which adds years to one's life."

Fresh Air is the Home

During the winter nights windows of some of the farmers' sleeping rooms are closed and all pure air is excluded. In summer those windows are probably open all night, and the tired farmer as he sleeps has a steady current of pure ozone freely circulating. No occupation takes a person into the great out-of-doors more than does the farmer's. He is accustomed to plenty of pure air. His lungs, therefore, sustain a severe shock when they are obliged to work over dead air all night to renew the owner's health and strength while he sleeps in a closed room, says Rural Life.

All physicians cry out a warning against so abusing the lungs and body. Life, even were it to cover a span of a century, is short and greatly prized. Health is the greatest asset given to human beings. Can any one afford to violate the laws of health to such an extent that one will fail to provide the cheapest thing there is on earth—pure air? Is the slight comfort of having the bedroom a little warmer in the morning when one arises a sufficient payment for the cost to health?

WHISKEY MAKES POOR FARMERS Man Who Gets Drunk Cannot Safely Be Trusted

In the Farm and Fireside a contributor, writing under the title "Booze and Business," tells as follows how whiskey makes poor farmers:

"About forty miles from me is a great nursery. Some five or six years ago their barn burned with twenty-eight horses in it. The night watchman was drunk and asleep in his room in the barn. He alone was saved by the heroic firemen when they arrived. Not a hair of a horse or a strap of a harness was saved. The barn with all its contents, except the drunken night watchman, was lost in flames and in smoke.

"The 15th of November the barn was burned again. Someone returning home about midnight noticed the nursery barn on fire a quarter of a mile away. They turned in the alarm and the local fire company rushed there with their equipment. And again they found the same old watchman drunk in his room in the barn; so drunk he had not heard the struggles of four horses as they broke loose from their stalls opposite his room. The firemen saved the watchman; everything else was lost, not a hair or a halter was saved. This time thirty horses were burned; four broke loose but never left the barn; the other twenty-six died with scarcely a struggle, evidently overcome by the smoke before the fire reached them.

"Booze and business will not mix. A man who gets drunk should never be given responsibility which involves the life and safety of human beings or dumb animals. It is almost criminal to give him such responsibility."

OLD AGE CAN BE CURED

Open Air and a Hobby Prescription That is Given

Old age can be cured. The prescription is a simple one; mix open air and a hobby, shake well, and take as many hours a day as possible. No one begins to age until he is bored, and the first gray

hair comes when a man suddenly thinks to himself, "What's the use?" Then is the time when a hobby makes life interesting again.

There was an official on one of our great railroads who was retired at seventy. "He'll die now," said his friends kindly. But he didn't. Instead, he became interested in the wild flowers, and now he is too busy looking for the ram's-head orchid, and trying to find a new station for the hart's-tongue fern, and tramping around in the woods and fields in all kinds of weather, even to think of dying. Anyway, he wouldn't have time until he's finished his monograph on the willows of the United States.—Lippincott's.

Learning About Fruit Growing as an Apprentice

Dear Mr. Green:—I have a strong desire to learn the growing of fruit trees, plants, etc.

The city in which I am living does not appeal to me.

I am in sympathy with your work; believe in it, and want to learn it. I am a man so intense that I succeed in everything I undertake by "putting my whole soul" in it. Am in middle life; small family. Can you invite me to come and see you with a view to entering your employment, if we can agree?

The wages are not all important; I want to learn as I go along. I have a reputation for "fairmindedness." Have a trained mind and am a good worker. I desire to leave the road for many reasons.—Reader, Ind.

Dear Sir: In reply I will say that we have never been able to do much with individuals who have come to us as you propose to come, and have never been able to satisfy such men. Neither have they satisfied us because of their dissatisfaction.

At Green's Fruit Farm our men are engaged in all kinds of work from hauling manure to repairing fences, digging trees, planting trees, making hay, harvesting and threshing grain, to picking berries, cherries, pears, apples, sorting fruits and packing fruits. The fact is our men are called upon to do whatever we have to do without any regard to what the men would like to do or what the men would learn most about fruit growing by doing. Our foreman has work enough to do

without having anybody about the place who has to be nursed or who has to have special work picked out for him that he may consider congenial or helpful to him in place of other kinds of work which are not so helpful or congenial.

Therefore after years of experience with men whom we classed as apprentices, who were bright men and worthy, and well disposed, we have decided not to have more to do with that class of laborers. Thus when an agricultural college wrote us that they were looking for places for ambitious young students of agriculture and horticulture, our reply was that we did not care to employ such help, although it is possible in thus declining that we may lose the services of a valuable helper.

I sent my own son, Marvin H. Green, to Green's Fruit Farm in order that he might serve an apprenticeship there. He was often sent to do unpleasant work, since the foreman could not always pick out a light and easy job for him. On one occasion he (over six feet high) was sent to the lowland to weed onions, or some kind of plants not larger than onions. The day was excessively hot and the location shut out any faint breeze that might have been moving on uplands. Mosquitoes were numerous. He was compelled to fight mosquitoes with one hand and pull weeds with the other, and still he stuck to his job valiantly, whereas many other boys would have thrown up the job and left in disgust.

A lady friend wrote me asking if I could employ her two sons to work at Green's Fruit Farm during the summer vacation. We have frequent applications from similar sources, but have declined them all. We have not had an apprentice on our place for nearly twenty years. We found that such apprentices had to be boarded and they were apt to be continually finding fault with their board. They had to be lodged and were finding fault with their lodgings. They were not satisfied to have other men receiving more wages than they received when it seemed to them they were doing much the same work that better paid men were doing.

"You'll be sorry some day that you didn't marry."

"Well, I'd rather not be married and be sorry I wasn't than be married and sorry I was."—New Orleans Times-Democrat.

More than 100,000 Farmers and Fruit Growers Use the STANDARD SPRAY PUMP



With it they spray their tallest orchard trees from the ground in half the time required by others. The knapsack attachment enables them to spray their potatoes and low growing crops at the rate of an acre an hour or better. They whitewash their barns and chicken coops and spray "dip" on their live stock with the Standard Spray Pump.

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Fix Values Early

All apple growers, operators, dealers and associations should arrive at an estimate of true values in order to secure a quick movement. It is explained that if arbitrarily high prices rule in the beginning of the season, the crop will not pass readily into consumption, but that, on the other hand, abnormal accumulation and congestion will occur throughout the channels of trade, with disastrous results to all concerned.

Only standard varieties well packed should be placed in cold storage for the reason that prices likely to rule in the late fall and early winter, as the inevitable result of liberal offerings of common storage stock, will probably limit the demand for cold-storage apples until midwinter.

An effort should be made to fully supply small towns by direct sales in order to secure a more uniform distribution and avoid congesting larger markets. Attention is called to the practice in some sections of growers who go with cars of apples to poorly supplied towns and sell on the track. Growers or dealers who desire to use this system should apply to the town and railway authorities for information as to regulations controlling such sales, and, if conditions justify shipping, the arrival of the car should be preceded by judicious advertising.

Growers who live in communities where co-operative organizations are operated should do all possible to strengthen these exchanges. It is asserted that the disloyalty of members is the chief element of failure in co-operative enterprises, and growers are strongly urged to support their associations as the best way to effect satisfactory distribution.

The Londoners called them militants when they broke only windows. Then "wild women" was the word. Now it is "furies." Henry Watterson, who can teach the English things about language, calls them "screeching hell cats."

APPLES WANTED

Apples Wanted

Wire lowest Price on best hand picked apples in bulk or barrels, or will handle on consignment.

JOS. FLOOD

901 W. Randolph St., - CHICAGO, ILL.

We Want Apples

in carload lots. Reliable growers write or wire us what you have.

W. H. LESSLY & CO.
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(Reference: Any Mercantile Agency)

APPLES WANTED

We have the outlet for bulk or bbls. Write us what you will have and wire when ready to ship.

Wm. HOPFMAN & CO.
CLEVELAND, OHIO

Why I Like Green's Fruit Grower

Written for Green's Fruit Grower by Calvin Forbes

I am in a position to see the most of the agricultural papers that are published in this country, and I often tell my neighbors that I think Green's Fruit Grower the best one that I get. For a number of years I have been studying the apple and how to grow it along with some of the other varieties of fruit, and there has seemed to me to be more timely articles along this line than in other papers. While this is true it does not hold entirely to the one subject of fruit. We all like variety, and like it in a magazine as well as anything else. We like to be entertained as well as instructed, and the little things that go to pass the time pleasantly are as much appreciated in a magazine as in any other thing. Besides all of this, Mr. Green is a man who seems to believe in himself, and as every one is in a position to know himself better than others do, he is justified in pushing ahead and doing the things that he knows to be right. In my opinion this is the cause of success or failure in most men's lives. We are apt to think of others as they estimate themselves.

Although as good as it is, I shall be very glad to see the improved issues, and shall welcome the advent of the New Year's No.

largely determine its vitality, freedom from disease, and general condition when stored. Cold storage is not a remedy or a restorative for poorly developed, weak, imperfect fruit, but is the most effective method of preserving the quality, flavor, and appearance possessed by the fruit at time of picking.

The first step in successful cold storage of apples has been found to lie in the practice of such cultural, spraying, and pruning methods as insure production of sound, healthy, well-colored fruit, free from disease. Assuming this as the first requisite, the following factors have been found to most influence the keeping quality of the fruit and furnish best conditions for long storage:

1. Proper maturity at time of picking.
2. Care in all handling operations.
3. Prompt storage after picking.
4. A proper storage temperature.

Careful and extensive investigations have demonstrated that fruit picked at full maturity can be held for a longer period in storage, and is less affected by scald and decay, than that picked when somewhat immature. Two important commercial varieties, Rome Beauty and Winesap, have been found to be especially susceptible to scald during storage, if picked prematurely. There is no doubt that several thousand dollars are lost to



Photograph of Wealthy apples grown by our correspondent, Calvin Forbes, of Michigan. Wealthy, while comparatively a new apple, has become popular over a wide extent of country owing to its hardiness, fine appearance and good fair quality.

Apple Growers Are Strongly Advised to Use Cold Storage

By United States Department of Agriculture

Specialists of the department call the attention of apple growers to the advantages of cold storage for steadying the market at harvest and for lengthening the selling period.

The following are the directions given by the apple-handling specialists of the department for using cold storage successfully in handling apples:

The proper function of cold storage is to retard the ripening processes of the fruit and the development of decay organisms and skin blemishes. The first responsibility for the keeping quality of his fruit rests with the grower, since it is his growing and handling methods that

the industry each year through the improper picking of these two varieties alone. The results emphasize strongly that more care and attention should be paid to this detail of the harvesting operations than is usually the case.

By full maturity, however, is not meant overmaturity, which may cause fully as heavy losses as immaturity. Each grower should study his own fruit and his own conditions in order to determine the proper picking stage. Probably the most reliable single indication of maturity is the whitening or slight yellowing of the "ground color" of the fruit. This is the color underlying the blush or red color and should not be confused with the latter.

A New Method of Keeping Cider Sweet.

Here is something new under the sun in regard to keeping cider sweet. We wonder that this method has not been discovered and practiced long ago:

It is conceded on all sides that if cider can be kept from the air, it will remain sweet. In order to bring about this condition in the easiest way possible, place the barrel of sweet cider on end after freeing the cider so far as possible of sediment or particles of apple pomace. Notice that by placing the barrel on end, not one-half of the surface ordinarily exposed to the air will be exposed. Then pour into the bung hole in the top of the barrel a pint or more of mustard seed unground. Then pour into the end of the barrel a quart of castor oil. This oil will remain on the surface and protect the cider beneath from coming in contact with the air. Then bung up the barrel and under no circumstances turn the barrel down on the side. Leave the barrel permanently on end. Have a faucet near the bottom of the barrel from which to draw the cider as wanted.

CIDER VINEGAR

Simple and Successful Method to Make a Good Article

Vinegar is easy to make. Complaints from farmers that their cider "won't turn to vinegar" are nearly always found to be due to a lack of knowledge of the following facts:

There are two changes which take place during the conversion of apple juice into vinegar: The sugar in the cider is changed to alcohol, and the alcohol is converted into acetic acid. The alcoholic fermentation is caused by yeast bacteria, and the acetic fermentation by the bacteria which are present in immense numbers in the "mother" of vinegar.

Both these changes require plenty of air and go on most rapidly at a temperature of about 75 degrees F. Failure of vinegar to "make" is usually due to lack of air or too low temperature, or to the addition of vinegar to fresh cider before the sugar in the cider has had time to be changed into alcohol.

The cask in which the fermentation is to take place should be filled not more than three-fourths full, in order to leave plenty of air space. The bung is left out, but a loose plug of cotton may be placed in the hole to keep dirt from falling into the cider. The closing of the bung hole of the barrel with an empty bottle or any other stopper is not only useless, but injurious, as it prevents the free entrance of air.

In a cool cellar it will take about six months for all the sugar to change to alcohol, and nearly two years for all the alcohol to change to acetic acid. By keeping the cask where the temperature remains at 60 to 70 degrees, the first change may be completed in about three months, and the second in a year or less. This requires the moving of the barrel to a warm cellar in winter and out-of-doors in summer.

The process may be hastened still more by adding compressed yeast, one cake, softened with lukewarm water, to each five gallons, to the fresh cider, and, after the yeast has finished working, from two to four quarts of good vinegar containing some "mother." In this way, it is possible to get good marketable vinegar in six to twelve months.

Horticultural Notes

In packing apples for market the less handling they get the better.

The city dealer profits by the laziness of the grower, by grading and repacking his badly assorted fruit.

It will pay to gather and destroy all wormy and decayed fruit in the orchard.

An orchard will live longer, bear better and be more profitable by being well cultivated and enriched.

Never use crates or boxes more than once. Neat, clean boxes sell first even though the fruit may not be up to the standard in every way.

A bunch of ripe grapes will hang in a hive of bees until it dries up and the bees will not touch it.

Where young orchards are kept perfectly clean by cultivation, there is seldom much injury sustained from mice during the winter.

As soon as shrubs are through blooming, prune them so that new and vigorous shoots will be sent out for next season's blooming.

When strawberries are through fruiting, remove the mulch and give cultivation. If the plants have made a rank growth, mow off the tops of the plants with the mower.

To make orcharding profitable the grower must receive enough for his fruit to pay the cost of growing and delivering it to the buyer, be he a consumer or broker, with a small margin for profit.

Red raspberries are propagated by suckers which come up around the old plants. These may be taken up in the autumn, heeled in during the winter and set out in a permanent bed the next spring.

Decayed apples on the ground in an orchard are a means of carrying over the winter the fungous diseases which cause rots. It is a good plan to remove the decayed fruit from the orchard.

Many farmers who have been growing fruit for years do not know that the apple and most other fruit trees form fruit buds in the late summer months. In very dry weather fruit buds are formed quite early and in case of a wet change into leaf buds. Most small fruits form their fruit buds in the spring.

12-16-20 Gauge Hammerless "Pump" Guns

The Marlin hammerless repeating shotgun is a fine-appearing, beautifully-balanced gun, without any objectionable humps or bumps; no holes on top for gas to blow out through or water to get in; can't freeze up with rain, snow or sleet; its solid steel breech (not a shell of wood) permits a thoroughly symmetrical gun without sacrificing strength or safety; it is the safest breech-loading shotgun ever built. Six shots in 12 and 16 gauges; five in 20 gauge.

It is Hammerless with Solid Steel Breech (inside as well as out)—Solid Top—Side Ejection—Matted Barrel (which costs \$4.00 extra on other guns)—Press Button Cartridge Release—(to remove loaded cartridges quickly from magazine without working through action) Double Extractors—Take-Down Feature—Trigger and Hammer Safety. Handles rapidly; guaranteed in shooting ability: price standard Grade "A" 12-gauge gun, \$22.60; 16- or 20-gauge, \$24.00.

Send 3 stamps postage for big catalog describing all Marlin repeating shotguns (hammer and hammerless), all Marlin repeating rifles, etc. Do it now!

The Marlin Firearms Co.,
39 Willow Street, New Haven, Conn.

New York

APR



We 400 APP Box, Barre

Crop in this states is prac ure this year. come from ou know how m will have a nities.

Green's Fruit Grower



I need
APPLES
—barrels of 'em!

I require 25,000 barrels of good fruit for storage and also immediate sale.

WE WANT
75 CARS
APPLES
BOX, BARREL and BULK

We will Need Many Cars of
APPLES
BOX, BARREL and BULK

I want
APPLES
Box-Barrel-Bulk
FORT WAYNE is ON THE MAP.
WE HAVE A GOOD OUTLET AND WANT
APPLS
Either Bulk or Barrels, also

APPLES
BOXED
PEARS
APPLES

**WANTED!!
APPLES**

"Sell America First"

Only 4% of American Apples were ever exported to Europe. There are not enough apples for our own people in U. S. Good Grade Apples always bring good prices.

The clippings on this page were taken from advertisements in an October 1914 issue of the Packer and show that apples are in demand.

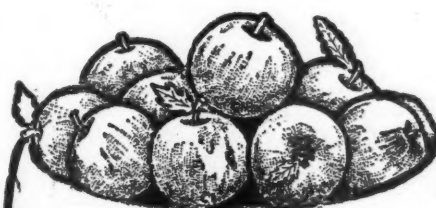
A call for 48 car loads of Good Grade Apples was turned down by our superintendent, he was sold out. In Hilton, N. Y., one man was asked to sell 80 car loads of Good Grade Apples which he could not supply because he had entirely sold out of his 10,980 barrels. This buyer expects to sell his apples at \$4.50 per barrel and up. The clippings from advertisements shown on this page tell the true apple condition.

Will you miss your opportunity to cash in on your orchard in five years? Then plant your orchard now, this fall. Plant the early bearing trees—Winter Banana, McIntosh Red, Wagener, and Wealthy. They produce good crops of apples in five years. Why not plant apple trees this November?

Thousands of our customers have sent in their orders for trees to plant this fall. You have plenty of time if you act at once. Write today.

GREEN'S NURSERY CO.
91 Wall St., ROCHESTER, N. Y.

**RED APPLES
WANTED**



We Will
BUY
500 CARS OF
APPLES
Box, Barrel or Bulk,

WE WANT TO HEAR FROM
BOX, BARREL and BULK
APPLE SHIPPERS
**WANTED!
APPLES.**



We Want
400 CARS
of
APPLES
Box, Barrel and Bulk

Crop in this and adjoining states is practically a failure this year. Supply must come from outside. Let us know how many cars you will have and what varieties.

We Need
APPLES
50 Cars
BULK and BARREL

I WANT
New York and Michigan
APPLES

Bulk & Barreled
APPLES WANTED
WANTED!
100 Cars
Barreled Apples

PRICE REDUCED!

NOW IS THE TIME TO BUILD OR IMPROVE Lumber Savings!

Shipments Direct From Chicago, Washington, Texas and Mississippi — Point Nearest You

Best Metal Roofing \$1.19 Per Sq.

Never before have we been so splendidly equipped to supply best roofing at lowest prices. We are originators of roofing direct to the consumer. In controlling our own factories we have made better arrangements for this season than ever before, to supply positively the best roofing bargains. \$1.19 buys 100 sq. ft. of brand new corrugated galvanized steel roofing. Light weight, sheets about 2 ft. x 8 ft., unspliced. Painted per square extra. Order by lot No. DR-24. Price per 100 sq. ft., f.o.b. Chicago \$1.19. \$1.78 buys 100 sq. ft. of brand new galvanized steel roofing. Perfect light weight, 22 inches upward 22 inches long. 1-1/4 inch corrugated. Order by lot No. DR-25. Price per 100 sq. ft., f.o.b. Chicago \$1.78.



Ready Roofing 49c Per Sq.

Greatest known values in dependable ready roof coverings. We call your attention to these three big snags. One buys the best and heaviest 3 ply rubber-surfaced, perfect, lasting roof covering. Our Ajax brand in rolls containing 100 sq. ft. 3 to 5 pieces in every roll. Nails and cement included. For 3 ply order by lot No. DR-26. For 2 ply, price per sq. 88c. Order by lot No. DR-27. For 1 ply, price per sq. 78c. Order by lot No. DR-28. For 1-1/2 ply price per square 48c. Order by lot No. DR-29. \$1.15 buys high grade red or green slate asphalt roofing. Rolls contain 100 sq. ft. 3 to 5 pieces in the roll. Nails and cement included. Order by lot No. DR-30. \$1.78 buys our unspliced heaviest weight white marble surfaced, perfect, lasting roof covering. Rolls contain 100 sq. ft. An unequalled quality and service guarantee for 20 years, goes with every roll. Nails and cement included. Order by lot No. DR-31. 1-1/2 above prices are f. o. b. Chicago, best weight possible.



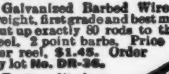
Strong Fencing 14c Per Rod

Here again our extensive operations and big deals enable us to quote heretofore unheard of low prices. Strong, heavy fencing (formerly secured recently at our own price) splendid fencing for hogs and all general farm purposes. 25-inch, 7 line wire high. Square mesh, stays 12 inches apart. Put up in rolls of 20, 30 and 40 rods. Order by lot No. DR-32. Same as above, except stays space 8 inches, per rod 21c. Order by lot No. DR-33. Staples for erection, 100 lbs. \$1.78. Order by lot No. DR-34. Our wire catalogue tells more.



Barb Wire Less Than 2c per Rod

New galvanized heavy weight barbed wire. Put up on 2 point barbs. Strong and well made for long service. Price per 100 lbs. \$1.58. Order by lot No. DR-35. Galvanized Barbed Wire Light weight, first grade and best made, put up exactly 50 rods to the roll, 2 point barbs. Price per rod, \$1.48. Order by lot No. DR-36. Best quality barbed wire per 100 lbs. \$2.28. Order by lot No. DR-37.



\$759 Buys the Material To Build this Home



This is our modern Harris Home No. 6-A. Easily built under our no shortage, no extras system, with positive accurate plans. A beautiful up-to-date, full-story, 7-room home with bath. The low price above clearly indicates a saving of from 14 to 1-1/2 made possible by our different methods. All first class material, sound construction and architecturally correct. Ready cut door and window frames; inside door jamb; outside door and window casings and back pulled. No money down. We will ship without one cent in advance. Ask about terms. Special coupon below and \$1.00 brings complete set of blue print plans, specifications, material list and guaranteed delivered price to your station. Regular price for this service is \$2.00. If the plans do not suit, return them and \$1.00 will be refunded. There are 30 other designs in our free Book of Plans. Write for your copy today, or send rough pencil sketch of the home you have in mind and we will make plans along your own ideas. Portable Houses, Garages and One-Buildings at Bargain Prices.

CHICAGO HOUSE WRECKING CO.

Now owned by the HARRIS BROTHERS CO., have decided that their best interests require more prominent use of the owners' names. This company has been favorably known to the public everywhere as "The Great Price Wreckers." For more than twenty years the four Harris Brothers have been the executive officers and owners. They have finally decided to operate under the name of HARRIS BROTHERS CO. There is no change in our business, except that the four Harris Brothers will advertise and sell their goods under our new name. The specimen bargains chosen at random from our enormous stocks must clearly indicate our determination to make this Fall Sale of 1914 a memorable one with this company. During the many years of our existence we have inaugurated bargain sales that have made history in the merchandise world. These sales have been the dawn of a new era in merchandising made possible by our price smashing methods; they have created for us an enviable reputation and justly earned title—"The World's Greatest Bargain Center."

Our Guarantee is Your Protection
There is no half way about it—every purchase you make from us will be exactly as represented, and you will be satisfied to the fullest extent, or we will take back any article not up to your fullest expectations, refund the purchase price, and stand all freight in the exchange. Our responsibility can be quickly established by referring to any publisher, bank or express company.

We Sell Practically Everything
Our stock includes every needed article in every line. No matter who you are, or what your vocation in life you have use for us. The quicker you realize this fact, the sooner you will profit by the big savings waiting here for you. We have been prominently known everywhere for 20 years for low prices. Our ability to satisfy thousands, and the successful methods of purchase and sale we employ has gained for us this justly earned title—

THE GREAT PRICE WRECKERS

1 1/4 H. P. Gasoline Engine \$21.60

The lightest, strongest, most compact gasoline engine ever produced. Cheerfully sent on 30 days trial and if not satisfactory, money returned with transportation charges included. Biggest and best value you ever saw for the money. An engine specially constructed for all purpose use. 4 cycle, self contained, horizontal, hopper cooled. Mounted on heavy wood skids, with battery box. Has automatic governor. Easy to start. An engine for the home, shop, factory or farm. Always a sure starter, non-balling and steady running. Order by lot No. DR-38. Larger size engines at correspondingly low prices.



4000 Dressers At Half

An extraordinary stock of extra-fine dressers, in the newest styles, in all sizes and made of the finest wood including mahogany, walnut, birch, etc. Maple. Chairs and dressing tables to match. Large dresser with big bowl French mirror splendidly finished and constructed, as low as \$5.35.

Save 1/2 On Beautiful Rugs

Finest rugs from auctions, all grades, sizes, patterns and colors. If you want to see the biggest rug, linoleum and carpet bargains ever offered the American buying public, be sure to see them in actual colors in our book, \$12.15. Run \$3.35. 36 inch Astoria \$7c.

SEND US Your Lumber Bill 4 Big Shipping Points

We ship from Washington, Texas, Mississippi or Chicago. Point nearest to you to reduce freight expenses. Prices on lumber absolutely busted to pieces—so low that they will positively save you big money. Every piece is brand new and up to grade. We have on hand upwards of 20,000,000 feet of high grade lumber, suitable for the construction of buildings of every kind. Pay us a visit here in Chicago—see this mammoth stock right here in our own lumber yard. Make your selections and watch us load your car. Here you will find material in just the grades you wish whether lumber, shingles or structural iron. In dollars of your money await you. Get in touch with us at once. Write today. Cash in advance not required.

98c Buys This Door

This splendid door bargain is but one of our building material snags. Consider this a good and substantial, four panel painted door for \$1.00. Guarantee yourself of the big savings we are equipped to make you on a full line of millwork of every description. Ask for our catalogue. You will get all the building information you require. Every sample from the catalogue for the erection of any building, given free.



BUY YOUR HEATING PLANT NOW

There are remarkable values we are offering this season in heating plants of every kind easily outdistances the great bargains offered heretofore. Whether you intend to install a steam, hot water or warm air heating plant, your interests demand that you get our figures before making any decision whatsoever. Our free expert engineering service makes it easy for you to do your own installing. In this way you eliminate the unnecessary and useless expense of high priced installers. Some idea of our ability to save you big money can be had from the warm air heating plants offered as low as \$27.00. Steam Heating Plants \$14.00. Hot Water Heating Plants \$18.00. Get our proposition today. Mail the coupon.

Complete Bathroom Outfit \$21

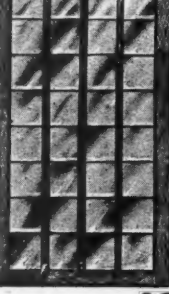
That's an actual saving to you of one half. The price above is for a brand new white-enamelled bath tub, all nickel plated trimmings including double bath cock for hot and cold water. Lavatory is one piece of latest design, all white enameled; nickel plated basin cocks and nickel plated trimmings. The tank is an approved pattern, steel white, porcelain enameled. Easy, painless and perfect action. Fitted with Douglas valve, composed lever and ball cock. The closet is sanitary and efficient, vitreous closet bowl; hardwood seat and cover; nickel plated hinges. Order by lot No. DR-39. Some idea of the big bargains in our complete Plumbing Book can be had from the above. This book contains every article from in dependable plumbing complete at prices proportionately low. Mail the coupon for your copy of this money saving guide.



Fill in This Coupon

HARRIS BROTHERS CO., Dept. L. B. X. 3 Chicago
Send me free of cost the following catalogues. (Place an X mark in square opposite the catalogue you wish)
☐ Catalogue of 50,000 Bargains ☐ Building Material
☐ Plan Book of Houses & Barns ☐ Roofing, Siding and Ceiling
☐ Wire and Fencing ☐ Plumbing & Heating ☐ Paint
My Name is _____
My Address is _____ State _____
County _____ P. O. _____

Buy Your Hot Bed Sash Now 10,000 Ready To Ship



IN LOTS OF 100 OR MORE EACH 79c
SIZE: 31 1/2 FEET 13 1/2 INCHES THICK
Our factory made this big quantity during the dull summer months, enabling us to offer them to you at a SAVING of 1-3 to 1-2. The sash are first-class in every respect—material, construction and workmanship. You will surely miss the BIGGEST BARGAIN of your life if you don't order right now. There are NO CROP FAILURES for the man who uses Hot Bed Sash. It means BIG MONEY and the work can be done during the months of the year when other work is not so pressing. The people are waiting up to this fact more and more each year. Fortunes are being made out of Hot Beds, and the supply is still far short of the demand. Our Main Talking Point in Addition to Superior Quality of Wood, Strength and Weather-Resisting Character of Our Hot Bed Sash, is a Point That Every Wise Buyer Recognizes.

LOW PRICES

These Prices are Free on Board Cars Chicago
OUR HOT BED SASH ARE MANUFACTURED IN STANDARD SIZE ONLY.
3 Feet x 6 Feet—1 1/2 Inch Thick. (Open) (Closed)
No. 10-D.R.-913. Less than one dozen. Price each, \$6.95 \$1.86
No. 10-D.R.-914. Dozen-Lots. " " .89 1.75
No. 10-D.R.-915. Lots of 50 to 100. " " .81 1.68
No. 10-D.R.-916. Lots of 100 or more. " " .79 1.58
For our Hot Bed Sash, woodwork coated with asphaltum paint, add 16c
Makes them last twice as long as any other hot bed sash on the market.

Michaelson's Paint House 89c Per Paint

The name "Michaelson's" on paint has been a guarantee of quality for 30 years. Our Paint Department is in charge of the highest quality paint. Order by lot No. DR-41. For best ready mixed, house paint at 89c per gal. Michaelson's Paint is superior. Order by lot No. DR-42. Write for free Paint Book.

Mixed Wire Nails 100 Lbs. \$1.28

Standard wire nails. Put up in 100 lb. bags, 16 kinds and sizes mixed together. Price per bag, \$1.28. 100 lb. bag of 16 kinds, 10-12, 12-14, 14-16, 16-18, 18-20, 20-22, 22-24, 24-26, 26-28, 28-30, 30-32, 32-34, 34-36, 36-38, 38-40, 40-42, 42-44, 44-46, 46-48, 48-50, 50-52, 52-54, 54-56, 56-58, 58-60, 60-62, 62-64, 64-66, 66-68, 68-70, 70-72, 72-74, 74-76, 76-78, 78-80, 80-82, 82-84, 84-86, 86-88, 88-90, 90-92, 92-94, 94-96, 96-98, 98-100, 100-102, 102-104, 104-106, 106-108, 108-110, 110-112, 112-114, 114-116, 116-118, 118-120, 120-122, 122-124, 124-126, 126-128, 128-130, 130-132, 132-134, 134-136, 136-138, 138-140, 140-142, 142-144, 144-146, 146-148, 148-150, 150-152, 152-154, 154-156, 156-158, 158-160, 160-162, 162-164, 164-166, 166-168, 168-170, 170-172, 172-174, 174-176, 176-178, 178-180, 180-182, 182-184, 184-186, 186-188, 188-190, 190-192, 192-194, 194-196, 196-198, 198-200, 200-202, 202-204, 204-206, 206-208, 208-210, 210-212, 212-214, 214-216, 216-218, 218-220, 220-222, 222-224, 224-226, 226-228, 228-230, 230-232, 232-234, 234-236, 236-238, 238-240, 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